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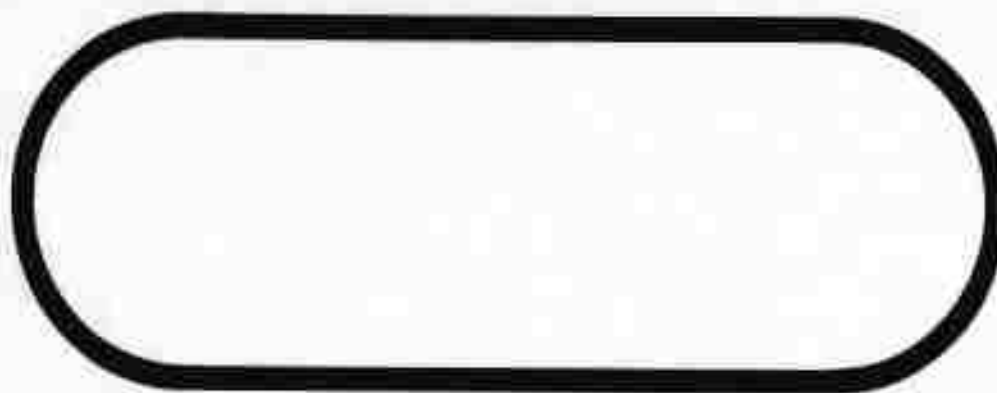
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SHEAR WEB AND PANEL TESTS

2-5142

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This document is submitted in partial fulfillment of paragraph B(1.1.1.1.9.2) of Statement of Work, System 620A, Exhibit 620A-62-2, dated 26 January 1962, revised 1 August 1962.



SUMMARY

This document covers all test work and test results for Dyna-Soar EWA 5-652.*

These tests were performed to determine the effects of thermal gradients on ultimate shear strengths of shear webs and determine the effects of different types of loading on shear webs and panels.

Fourteen specimens were tested to failure. Specimens were of three different configurations.

The specimens were tested under two different types of loading and at room and elevated temperatures. The conditions simulated Dyna-Soar flight conditions.

The test specimen configurations, instrumentation, test plans, conditions and test results are detailed in this document section.

Test readings have been included in this report in the form of computer print-out data and hand written data. This data includes temperature, deflection, load and strain readings.

Photographs of each failed specimen and typical test setups are included in this report.

*See Reference Index on page 41

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D2-6783-1, Structural Integrity Development and Test Program -
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1.0

INTRODUCTION

The purpose of this document is to preserve and transmit test data collected and recorded during the corrugated shear web and panel tests.

Six corrugated shear webs representative of Dyna-Soar structural elements and eight corrugated shear panels representative of Dyna-Soar control surfaces were tested under various conditions. These tests simulated various loading and temperature conditions encountered by the glider during re-entry.

2.0 TEST SPECIMENS AND INSTRUMENTATION

2.1 TEST SPECIMENS

2.1.1 Test specimen configurations are of three types.

2.1.2 Corrugated Shear Web Specimens LT-5652-1-1, -1-2, -1-3, -2-1, -3-1 and -3-2 were fabricated in accordance with BAC Drawing Part Number 25-80307-1.

2.1.3 Shear Panel Specimen LT-5652-6-1 thru -6-7 were fabricated in accordance with BAC Drawing Part Number 25-80578-1.

2.1.4 Shear Web Specimen LT-5652-8 was fabricated in accordance with BAC Drawing Part Number 25-80578-6.

2.1.5 The test specimens were designed and fabricated with angles, doublers, fasteners, corrugated panels, and masses representative of the following structural elements.

1. Spar support beams
2. Torque box ends
3. Control surface structural elements
4. Rudder control surfaces
5. Elevon control surfaces

2.1.6 Corrugated Rene' 41 sheet material of various gages was used for the fabrication of the control surface panels and shear web panels. Rene' 41 material was used also for the fabrication of the panel components.

2.2 INSTRUMENTATION

2.2.1 The test specimens were instrumented as follows:

1. #22-AWG refrasil insulated chromel-alumel thermocouples were spot-welded to the specimens to record test temperatures.
2. Type FABR-12-12-86 Rosette strain gages were installed on the specimens to record strain.
3. EDI (Electrical Deflection Indicator) tabs were spot-welded to the specimen to record linear motion.

2.2.2 LT-5652-1-1 was instrumented with eight (8) EDI tabs located as shown in Figure 13.

2.2.3 LT-5652-1-2 was instrumented with eight (8) EDI tabs and ten (10) Rosette strain gages (3 channels each) located as shown in Figures 13 and 19 respectively.

2.2.4 LT-5652-1-3 was instrumented with eight (8) EDI tabs and twenty (20) Rosette strain gages (3 channels each) located as shown in Figures 14 and 20 respectively.

2.2.5 LT-5652-2-1, -3-1, and -3-2 each were instrumented with eight (8) EDI tabs and forty-five (45) thermocouples.

2.2.6 The EDI tab locations are shown in Figures 15 and 16. The thermocouple locations are shown in Figure 5.

2.2.7 LT-5652-6-1 through -6-8 were instrumented with eight (8) EDI tabs as shown in Figures 17 and 18.

2.2.8 All strain gages were installed per instructions in Figure 1.

3.0 TEST SETUP

3.1 Typical test setups are shown in Figures 23 through 29.

3.1.1 Specimens LT-5652-1-1, -1-2, -1-3, -2-1, -3-1, and -3-2 were mounted in a vertical position for shear loading. A stabilizing plate was used to resist torsional rotation and the specimens were pinned in two locations to provide a reaction normal to the hydraulic jack load line. See Figure 23.

3.1.2 Specimens LT-5652-6-1 through -6-8 were mounted in a horizontal position for shear and/or pressure loading. The specimens were pinned in four places with a hydraulic jack providing the shear load. A pressure box provided the pressure load. See Figures 24 through 26.

3.1.3 Specimen LT-5652-2-1 was mounted in a vertical position with upper and lower horizontal heat shields attached normal to shear web (see Figure 12 for test configuration). The heat lamps were mounted below the lower heat shield in a horizontal position as shown in Figures 27 and 28.

3.1.3.1 Babcock and Wilcox Company K-30 firebrick was used to surround the specimen to reduce heat loss due to radiation and convection (see firebrick support ring and firebrick photo in Figures 11 and 12, respectively).

3.1.4 Specimen LT-5652-3-1 and -3-2 were mounted in a vertical position without any upper or lower heat shields. The heat lamps were mounted parallel to specimen sides, top and bottom, as shown in Figure 29.

3.1.4.1 No firebrick was used on specimen LT-5652-3-1 and -3-2 elevated temperature tests.

3.1.5 The high density, air-cooled, radiant heater assemblies were attached to the lamp jigs.

3.1.5.1 Twenty-nine (29) high density, air-cooled, radiant heaters were used for heating test specimen LT-5652-2-1.

3.1.5.2 Eight (8) heating zones were used on specimen LT-5652-2-1 to maintain the required temperature gradient (see heat zone layout in Figure 21).

3.1.5.3 Sixteen (16) high density, air-cooled radiant heaters were used for heating test specimen LT-5652-3-1 and -3-2.

3.1.5.4 Nine (9) heating zones were used on specimens LT-5652-3-1 and -3-2 to maintain the required temperature gradient (see heat zone layout in Figure 22).

- 3.1.6 Power to heat lamps was supplied by three (3) 440 KVA ignitron power controllers.
- 3.1.7 Control thermocouple data was recorded by strip chart recorders.
- 3.1.8 Monitor thermocouple data was recorded by a digital data system.

- 4.0 TEST PROCEDURE
- 4.1 Corrugated shear web and panel tests were performed under various loading and temperature conditions.
- 4.2 LT 5-652-1 corrugated shear web test procedures.
- 4.2.1 Specimen LT 5-652-1-1 was tested at room temperature.
- 4.2.1.1 The shear load was applied in increments of 10% of the estimated ultimate load of 4450 pounds (see Figure 6 for loading scheme).
- 4.2.1.2 Electrical deflection indicator (EDI) readings were recorded at each load increment (see EDI readings in Figure 89).
- 4.2.1.3 The load program and actual recorded load curve appears in Figure 77.
- 4.2.2 Specimen LT 5-652-1-2 was tested at room temperature.
- 4.2.2.1 The shear load was applied in increments of 10% of the estimated ultimate load of 4450 pounds (see Figure 6 for loading scheme).
- 4.2.2.2 EDI readings were recorded at each load increment (see EDI readings in Figure 90).
- 4.2.2.3 The load program and actual recorded load curve appears in Figure 78.
- 4.2.2.4 Rosette strain gage readings were recorded by a digital data system (see readings in Figures 101 through 122).
- 4.2.3 Specimen LT 5-652-1-3 was tested at room temperature.
- 4.2.3.1 The shear load was applied in increments of 10% of the estimated ultimate load of 4500 pounds (see Figure 6 for loading scheme).
- 4.2.3.2 EDI readings were recorded at each load increment (see EDI readings in Figures 91 and 92).
- 4.2.3.3 The load program and actual recorded load curve appears in Figure 79.
- 4.2.3.4 Rosette strain gage readings were recorded by a digital data system (see readings in Figures 123 through 144).
- 4.3 LT 5-652-2 corrugated shear web test procedures.
- 4.3.1 Specimen LT 5-652-2-1 was tested at approximately 1300° F. Heat was applied from below a re-radiating shield. The shear web was attached in a normal position to the lower heat shield. The original objective was to heat the specimen at the rate of 1° F./sec. to 1750° F. with intermediate holds for maintaining temperature differences as noted in Table 1, Figure 2, but heat losses in the test setup prevented the attainment of the desired heat program. Refer to Paragraph 4.3.1.3 for thermocouple readings.

- 4.3.1.1 The shear load was applied in increments of 10% of the estimated ultimate load of 2380 pounds (see Figure 6 for loading scheme).
- 4.3.1.2 The load program and actual recorded load curve appears in Figure 80.
- 4.3.1.3 The temperature, EDI, and load readings were recorded by a digital data system (see readings in Figures 146 through 173, Figures 174 through 181, and Figures 178 through 181, respectively).
- 4.4 LT-5652-3 corrugated shear web test procedures.
 - 4.4.1 Specimen LT-5652-3-1 was tested at 1750°F with a 200°F temperature gradient as noted in Table 2, Figure 2. No upper or lower heat shields were used. The heat was applied directly to the sides, top, and bottom of the specimen. The temperature was increased at a rate of 2°F/sec to 1750°F with holds to maintain the temperature differences noted in Table 1, Figure 2.
 - 4.4.1.1 The shear load was applied in increments of 10% of the estimated ultimate load of 2125 pounds (see Figure 6 for loading scheme).
 - 4.4.1.2 The load program and actual recorded load curve appears in Figure 81.
 - 4.4.1.3 The temperature, EDI, and load readings were recorded by a digital data system (see readings in Figures 182 through 206, Figures 207 through 212, and Figures 210 through 212, respectively).
 - 4.4.2 Specimen LT-5652-3-2 was tested at 1750°F with a 300°F temperature gradient as noted in Table 2, Figure 2. No upper or lower heat shields were used. The heat was applied directly to the sides, top, and bottom of the specimen. The temperature was increased at a rate of 1°F/sec to 1750°F with holds to maintain the temperature differences noted in Table 1, Figure 2.
 - 4.4.2.1 The shear load was applied in increments of 10% of the estimated ultimate load of 2375 pounds (see Figure 6 for loading scheme).
 - 4.4.2.2 The load program and actual recorded load curve appears in Figure 82.
 - 4.4.2.3 The thermocouple, EDI, and load readings were recorded by a digital data system (see readings in Figures 232 through 286, Figures 275 through 286, and Figures 281 through 286, respectively).
- 4.5 LT-5652-6 corrugated shear panel test procedures.
 - 4.5.1 Specimens LT-5652-6-1 and -6-2 were tested at room temperature.
 - 4.5.1.1 The shear loads were applied in increments of 10% of the estimated ultimate loads of 34.60 KIPS (see Figure 7 for loading scheme).

4.5.1.2 No load program was used on these tests.

4.5.1.3 EDI readings were recorded at each load increment (see EDI readings in Figures 93 and 94, respectively)

4.5.2 Specimens LT-5652-6-3, -6-4 and -6-5 were tested at room temperature.

4.5.2.1 The three (3) test loads were applied in increments of 10% of the estimated ultimate shear load of 12.15 KIPS. The three (3) test loads consisted of a shear load applied simultaneously with a surface pressure load in the ratio of 30 (load ratio = lbs. per inch of panel length/lbs. per sq. inch of panel surface). See Figures 7 and 8 for loading scheme.

4.5.2.2 The three (3) load vs. pressure programs and the actual recorded load vs. pressure curves appear in Figures 83, 84, and 85, respectively.

4.5.2.3 EDI readings were recorded at each load increment (see EDI readings in Figures 95, 96, and 97, respectively).

4.5.3 Specimens LT-5652-6-6 and -6-7 were tested at room temperature.

4.5.3.1 The two (2) test loads were applied in increments of 10% of the estimated ultimate shear load of 22.50 KIPS. The two (2) test loads consisted of a shear load applied simultaneously with a surface pressure load in a ratio of 100. (Load ratio = lbs. per inch of panel length/lbs. per sq. inch of panel surface) See Figures 7 and 8 for loading scheme.

4.5.3.2 The two (2) load vs. pressure programs and the actual recorded load vs. pressure curves appear in Figures 86 and 87, respectively.

4.5.3.3 EDI readings were recorded at each load increment (see EDI readings in Figures 98 and 99, respectively).

4.5.4 Specimen LT-5652-6-8 was tested at room temperature.

4.5.4.1 Prior to testing the specimen was subjected to a heat cycle. The specimen was heated to 1200°F at a rate of 5°F/sec. and held at 1200°F for five (5) minutes. Then the panel was cooled to 500°F at a rate of 5°F/sec., then air cooled to room temperature.

4.5.4.2 A test load was applied in increments of 10% of the estimated ultimate shear load of 22.5 KIPS. The test load consisted of a shear load applied simultaneously with a surface pressure load in a ratio of 100. (Load ratio = lbs. per inch of panel length/lbs. per sq. inch of panel surface) See Figures 7 and 8 for loading scheme.

- 4.5.1.2 No load program was used on these tests.
- 4.5.1.3 EDI readings were recorded at each load increment (see EDI readings in Figures 93 and 94, respectively)
- 4.5.2 Specimens LT-5652-6-3, -6-4 and -6-5 were tested at room temperature.
 - 4.5.2.1 The three (3) test loads were applied in increments of 10% of the estimated ultimate shear load of 12.15 KIPS. The three (3) test loads consisted of a shear load applied simultaneously with a surface pressure load in the ratio of 30 (load ratio = lbs. per inch of panel length/lbs. per sq. inch of panel surface). See Figures 7 and 8 for loading scheme.
 - 4.5.2.2 The three (3) load vs. pressure programs and the actual recorded load vs. pressure curves appear in Figures 83, 84, and 85, respectively.
 - 4.5.2.3 EDI readings were recorded at each load increment (see EDI readings in Figures 95, 96, and 97, respectively).
- 4.5.3 Specimens LT-5652-6-6 and -6-7 were tested at room temperature.
 - 4.5.3.1 The two (2) test loads were applied in increments of 10% of the estimated ultimate shear load of 22.50 KIPS. The two (2) test loads consisted of a shear load applied simultaneously with a surface pressure load in a ratio of 100. (Load ratio = lbs. per inch of panel length/lbs. per sq. inch of panel surface) See Figures 7 and 8 for loading scheme.
 - 4.5.3.2 The two (2) load vs. pressure programs and the actual recorded load vs. pressure curves appear in Figures 86 and 87, respectively.
 - 4.5.3.3 EDI readings were recorded at each load increment (see EDI readings in Figures 98 and 99, respectively)
- 4.5.4 Specimen LT-5652-6-8 was tested at room temperature.
 - 4.5.4.1 Prior to testing the specimen was subjected to a heat cycle. The specimen was heated to 1200°F at a rate of 5°F/sec. and held at 1200°F for five (5) minutes. Then the panel was cooled to 500°F at a rate of 5°F/sec., then air cooled to room temperature.
 - 4.5.4.2 A test load was applied in increments of 10% of the estimated ultimate shear load of 22.5 KIPS. The test load consisted of a shear load applied simultaneously with a surface pressure load in a ratio of 100. (Load ratio = lbs. per inch of panel length/lbs. per sq. inch of panel surface) See Figures 7 and 8 for loading scheme.

4.5.4.3 The load vs. pressure program and the actual recorded load vs. pressure curve appears in Figure 88.

4.5.4.4 EDI readings were recorded at each load increment (EDI readings appear in Figure 100).

5.0 TEST RESULTS

5.1 Corrugated shear web and panel test results include EDI, thermocouple and load readings, ultimate loads, and photographs of failures.

5.2 LT-5652-1 corrugated shear web test results.

5.2.1 Specimen LT-5652-1-1 buckled across the corrugations as shown in Figures 30 through 32. After buckling, the specimen continued to carry the increasing load until testing was terminated at 160% of the estimated ultimate load or 7120 pounds.

5.2.2 Specimen LT-5652-1-2 buckled across the corrugations as shown in Figures 33 and 34. After buckling, the specimen continued to carry the increasing load until testing was terminated at 180% of the estimated ultimate load or 8010 pounds.

5.2.3 Specimens LT-5652-1-3 buckled across the corrugations as shown in Figures 35 and 36. After buckling, the specimen continued to carry the increasing load until testing was terminated at 130% of the estimated ultimate load or 5850 pounds.

5.3 LT-5652-2 corrugated shear web test results.

5.3.1 Specimen LT-5652-2-1 buckled and was torn across the corrugations as shown in Figures 37 and 38. After buckling occurred, the specimen continued to carry the increasing load until failure occurred at 250% of the estimated ultimate load or 5950 pounds. Test temperature was approximately 1300°F.

5.4 LT-5652-3 corrugated shear web test results.

5.4.1 Specimen LT-5652-3-1 buckled across the corrugations as shown in Figures 39 and 40. After buckling occurred, the specimen continued to carry the increasing load until testing was terminated at 190% of the estimated ultimate load or 4040 pounds. Test temperature was 1750°F with a 200° gradient.

5.4.2 Specimen LT-5652-3-2 buckled across the corrugations as shown in Figures 41 and 42. After buckling occurred, the specimen continued to carry the increasing load until the testing was terminated at 190% of the estimated ultimate load or 4510 pounds. Test temperature was 1750°F with a 300°F gradient. After being at the temperature of 1750°F for 3.5 minutes, a power failure occurred. The temperature dropped to 350°F before power was restored. After power restoration, the temperature was raised to 1750°F for completion of testing.

- 5.5 LT-5652-6 corrugated shear panel test results.
- 5.5.1 Specimen LT-5652-6-1 buckled and was torn as shown in Figures 44 through 47. Specimen failure occurred at 26.0 Kips.
- 5.5.2 Specimen LT-5652-6-2 buckled and was torn as shown in Figures 48 through 52. Specimen failure occurred at 24.8 Kips.
- 5.5.3 Specimen LT-5652-6-3 buckled and was torn as shown in Figures 53 through 59. Specimen failure occurred at 130% of the estimated ultimate load or 15.80 Kips.
- 5.5.4 Specimen LT-5652-6-4 buckled and was torn as shown in Figures 60 and 61. Specimen failure occurred at 136% of the estimated ultimate load or 16.45 Kips.
- 5.5.5 Specimen LT-5652-6-5 buckled and was torn as shown in Figures 62 through 67. Specimen failure occurred at 156% of the estimated ultimate load or 18.95 Kips.
- 5.5.6 Specimen LT-5652-6-6 buckled and was torn as shown in Figures 68 through 70. Specimen failure occurred at 98% of the estimated ultimate load or 22.05 Kips.
- 5.5.7 Specimen LT-5652-6-7 buckled and was torn as shown in Figures 71 through 73. Specimen failure occurred at 97% of the estimated ultimate load or 21.85 Kips.
- 5.5.8 Specimen LT-5652-6-8 buckled and was torn as shown in Figures 74 through 76. Before testing, the specimen was thermal-cycled up to 1200°F and cooled to R.T. Specimen failure occurred at 106% of the estimated ultimate load or 23.85 Kips.
- 5.6 See page 21 for tabulated test results.

5.6 TABULATED TEST RESULTS

INSULATED TEST RESULTS

PANEL NO.	DWG. NO.	TYPE					GAGE		MAX. PRESSURE PSI	
		a* In.	b* In.	c* In.	d* In.	e* In.	t* Inches			
							SKIN	CORRUGATION		
LT5652-1-1	25-80307-1	8	18	.75	.542	.50	—	.010	72	0
-1-2	↑	↑	↑	↑	↑	↑	—	↑	72	0
-1-3	↓						—		72	0
-2-1							—		1300	0
-3-1	↓	↓	↓	↓	↓	↓	—	↓	1750 to 1550	0
LT5652-3-2	25-80307-1	8	18	.75	.542	.50	—	.010	1750 to 1450	0
LT5652-6-1	25-80578-1	15	35	.75	.250	.75	.008	.010	72	0
-6-2	↑	↑	↑	↑	↑	↑	↑	↑	↑	0
-6-3										14.8
-6-4										15.3
-6-5										17.8
-6-6	↓									6.05
-6-7	25-80578-1	↓	↓	↓	↓	↓	↓	↓	↓	6.10
LT5652-6-8	25-80578-6	15	35	.75	.250	.75	.008	.010	72	6.75

1 Buckling load initiation determined from EDI readings of D01 recorded for LT-5652-1-1 thru -3-2 (see fig. 13 thru 16 for locations) and from EDI readings of D02 recorded for LT-5652-6-1 thru -6-8. (see Fig. 17 for locations).

2 Buckling stress = buckling load / (a) ($t_{\text{skin}} + t_{\text{corrug}}$)

3 Calculated from strain rosette gage readings ($E = 30,000,000$ PSI at room temperature). See Page 22 for extrapolation of calculated shear stress to panel edge support ξ .

4 See tabulated data: Fig. 101 thru 111

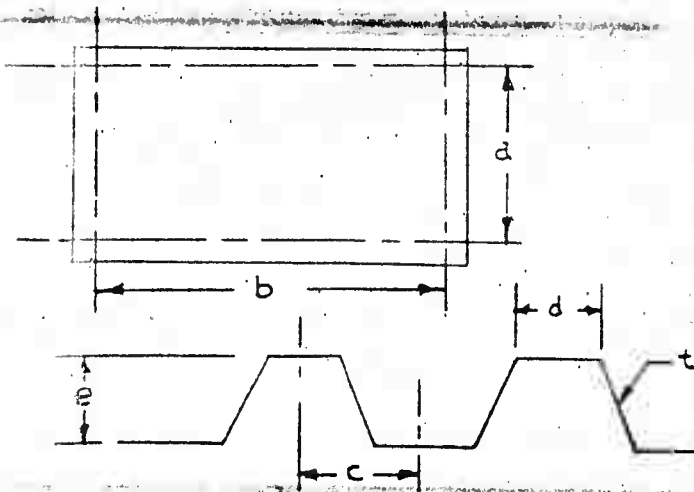
5 See tabulated data: Fig. 123 thru 133

6 Buckling Stress = $\frac{\text{Buckling Load}}{(b) (t_{\text{skin}} + t_{\text{corrug}})}$

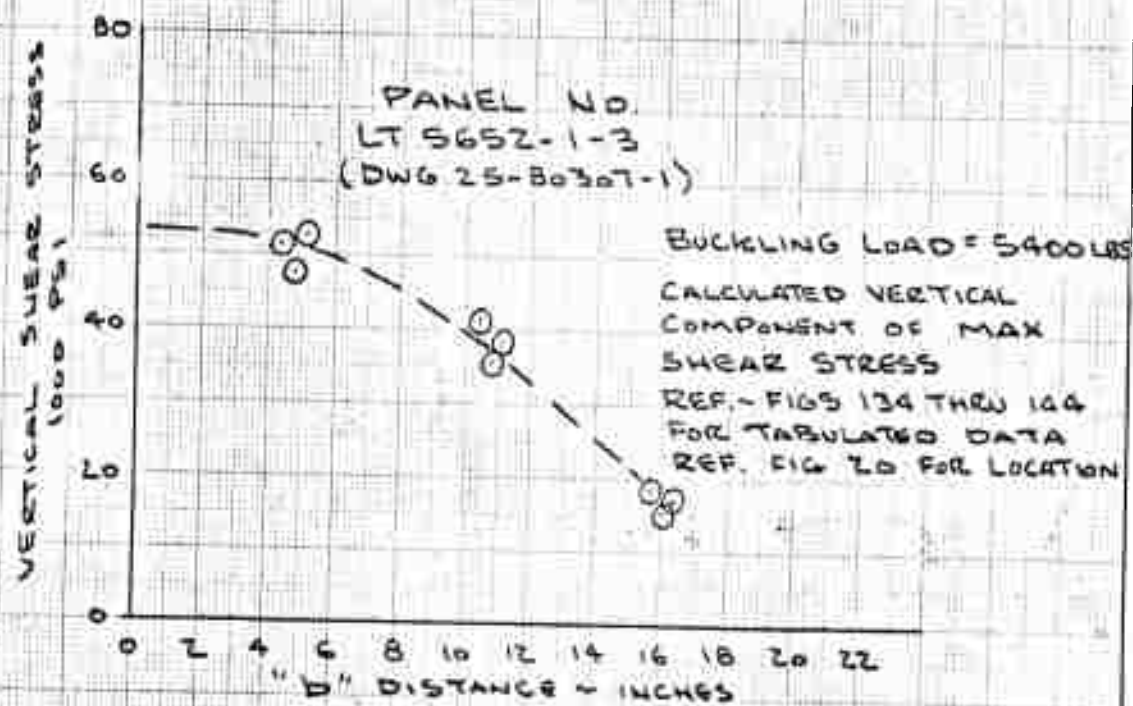
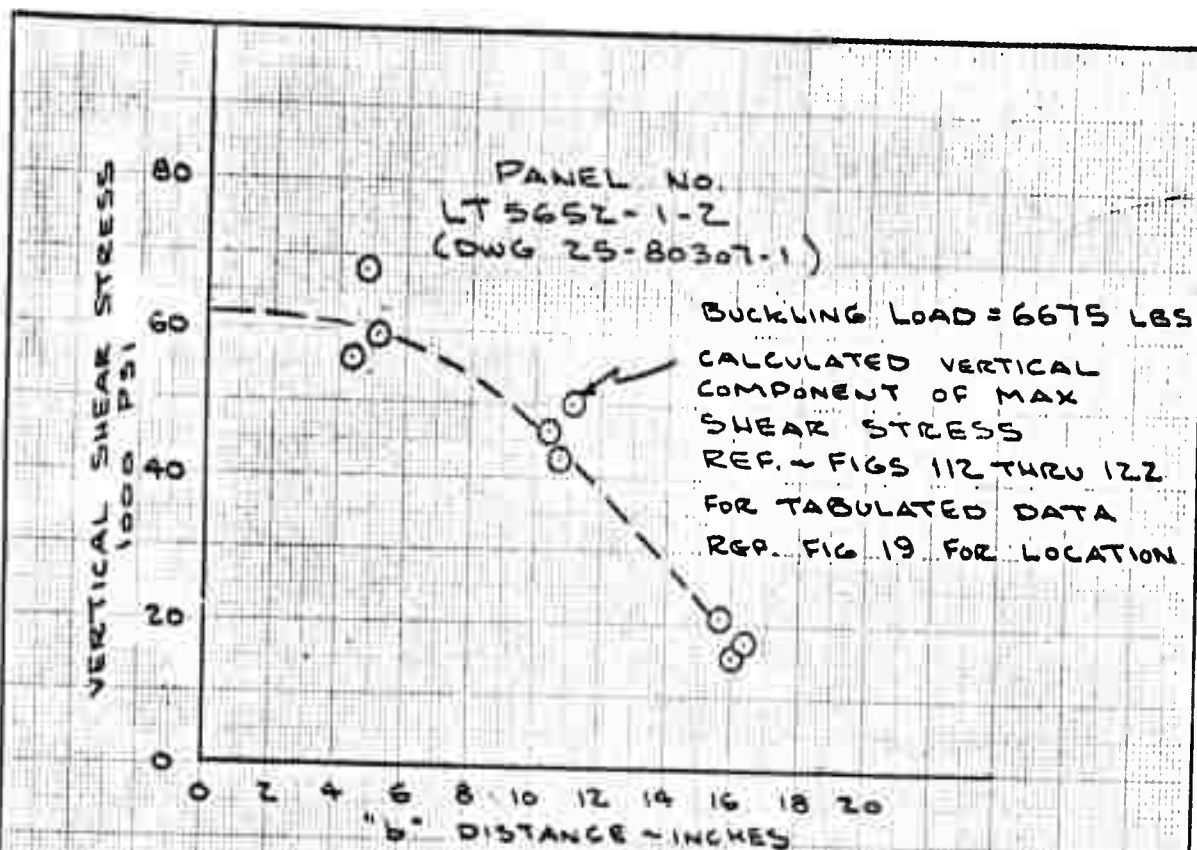
CALC	JLO	8-16	REVIS
CHECK			
APR.			
APR	RRL	8-23	

2

e*	GAGE t* Inches		MEASURED PANEL TEMP. °F.	MAX. PRESSURE PSI	BUCKLING LOAD Lbs.	AVG BUCKLING STRESS PSI	MEASURED STRAIN @ BUCKLING 100's of Micro In./In.	CALCULATED STRESS @ BUCKLING STRAIN PSI	ULT. LOAD Lb.
	SKIN	CORRUGATION							
.50	—	.010	72	0	6,230	77900	—	—	7,120
↑	—	↑	72	0	6,675	83400	△	62000	8,010
—	—	—	72	0	5,400	67500	△	53000	5,850
—	—	—	1300	0	5,476	68400	—	—	5,950
—	—	—	1750 to 1550	0	2,466	30800	—	—	4,040
↓	—	↓	1750 to 1450	0	2,273	28400	—	—	4,510
.50	—	.010	1750 to 1450	0	2,273	28400	—	—	4,510
.75	.008	.010	72	0	24,220	38500	—	—	26,000
↑	↑	↑	↑	0	24,220	38500	—	—	24,800
—	—	—	—	14.8	13,370	21200	—	—	15,800
—	—	—	—	15.3	12,150	19300	—	—	26,450
—	—	—	—	17.8	12,150	19300	—	—	18,950
—	—	—	—	6.05	18,000	28600	—	—	22,050
—	—	—	—	6.10	20,250	32100	—	—	21,850
↓	↓	↓	↓	—	—	—	—	—	—
.75	.008	.010	72	6.75	20,250	32100	—	—	23,850



CALC	JLO	8-16	REVISED	DATE	TABULATED TEST RESULTS BOEING AIRPLANE COMPANY SEATTLE 24, WASHINGTON	EWA 5-652
CHECK						D2-80081
APR.						PAGE
APR.	RRL	8-23				21



CALC	JLO	8/27	REVISED	DATE	TEST RESULTS PANEL VERTICAL SHEAR STRESS (CALCULATED)		EWA 5652
CHECK							02-80081
APR	REL	8/27			THE BOEING COMPANY		PAGE
APR							22

6.0 TEST OBSERVATIONS

6.1 LT-5652-1 corrugated shear web tests representative of Dyna-Sear structural elements.

6.1.1 LT-5652-1-1, -1-2 and -1-3 tests were performed without any malfunctions or delays.

6.1.1.1 All tests were conducted at room temperature and applicable readings (strain, deflection and load) were recorded.

6.2 LT-5652-2 corrugated shear web tests simulating an interior structure element.

6.2.1 LT-5652-2-1 test was performed satisfactorily except as noted in 4.3.1.

6.2.1.1 The lower heat shield temperature was increased at a rate of 1°F/sec to 1150°F and held for eleven minutes. The hold period was required to allow the temperature difference between thermocouples "A" and "B" (located on lower angle assembly) to decrease from 240°F to 175°F (250°F maximum allowable).

6.2.1.2 When the difference was 175°F, the lower heat shield temperature was increased to 1600°F. A ten minute hold was required to decrease the temperature difference between thermocouples "A" and "B" from 225°F to 175°F.

6.2.1.3 The temperature was then increased to 1750°F on the heat shield.

6.2.1.4 To maintain a temperature difference of 150°F to 175°F, the lower heat shield (adjacent to the lower fitting) was held at 1580°F.

6.2.1.5 All deflection, load, and thermocouple readings were recorded.

6.2.1.6 After failure, the specimen was allowed to air cool.

6.3 LT-5652-3 corrugated shear web tests simulating interior structural elements.

6.3.1 LT-5652-3-1 test was performed satisfactorily.

6.3.1.1 The lower and upper heat shields were omitted with the heat applied directly to the specimen.

6.3.1.2 The base temperature of 1750°F with a 200°F gradient was obtained by varying power to the heat lamps in the various heat zones.

- 6.3.1.3 During the heatup time, several hold periods were required to maintain temperatures within specified limits.
- 6.3.1.4 After failure, specimen was slowly cooled to maintain temperature differences.
- 6.3.1.5 All deflection, load and thermocouple readings were recorded.
- 6.3.2 LT-5652-3-2 test was performed satisfactorily.
- 6.3.2.1 The lower and upper heat shields were omitted with the heat applied directly to the specimen.
- 6.3.2.2 The base temperature of 1750°F with a 300°F gradient was obtained by varying power to the heat lamps in the various heat zones.
- 6.3.2.3 During the heat up time, several hold periods were required to maintain temperatures within specified limits.
- 6.3.2.4 The design temperature was reached and held for 3.5 minutes when a power failure occurred.
- 6.3.2.5 The temperature difference on thermocouples 40 and 42 (on shear fitting) reached 350°F before power could be restored.
- 6.3.2.6 When the power was restored, the temperature was increased to 1750°F.
- 6.3.2.7 After failure, specimen was cooled to maintain temperature differences.
- 6.3.2.8 All deflection, load and thermocouple readings were recorded.
- 6.4 LT-5652-6 corrugated shear panel tests simulating Dyna-Soar control surfaces.
- 6.4.1 LT-5652-6-1, -6-2, -6-4, -6-5, -6-6 and -6-7 tests were performed without any malfunctions.
- 6.4.2 LT-5652-6-3 test had a malfunction when the test jigs failed. After the jig was repaired, testing was resumed without further delays.
- 6.4.3 LT-5652-6-8 test had a malfunction when in a reacting rod (see flagnote 2 in Figure 7) failed and minor panel damage occurred. After rod was replaced, testing was resumed. Panel was used with the minor damage.
- 6.4.4 All deflection, load and strain readings were recorded.

STRAIN GAGING PROCEDURES
Corrugated Shear Web
Test LT-5652-1

1. Lightly sand surface to be gaged with 150 grit emery paper. Keep sanding to a minimum.
2. Clean sanded area with C. P.* ethyl acetate.
3. Clean underside of gage with C. P.* ethyl acetate. Trim gage as necessary to facilitate mounting.
4. Apply thin coat of EPY 150** to sanded area and to underside of gage.
5. Set gage down on desired location and cover with cellophane and rubber pad.
6. Immediately apply a constant load of 5-10 pounds and allow gage to dry for 2 hours.
7. Remove load and allow gage to cure 2 more hours.
8. Cure gages at 150°F for 2 hours.
9. Attach 6 inch transition leads to each gage and tack them down with a small amount of Epon 6 near the gage.
10. Attach 20 feet long No. 20 AWG vinyl insulated leads to the transition leads. Color code the leads as follows: gage A - red, gage B - white, gage C - black. Identify each pair of leads by tagging them with the respective gage numbers.
11. Mount two gages on a Rene' 41 dummy plate and wire them in the same manner as above. Label the leads on one gage "pilot" and the leads on the other "standard".
12. Mount 2 strain gage "J" boxes on a plywood board and label them No. 1 and No. 2 respectively.

GAGE

Type: FABR***-12-12-S6
Resistance: 120.5 \pm .5
Factor: 2.05 \pm 1%
Lot: 211-J

*C.P. = Commercially Pure
**EPY 150 = Epoxy Adhesive 150
(Manufactured by Baldwin-Lima-Hamilton)
***FABR = Foil - Constantin - Bakelite - Rosette
(Manufactured by Baldwin-Lima-Hamilton)

TABLE 1

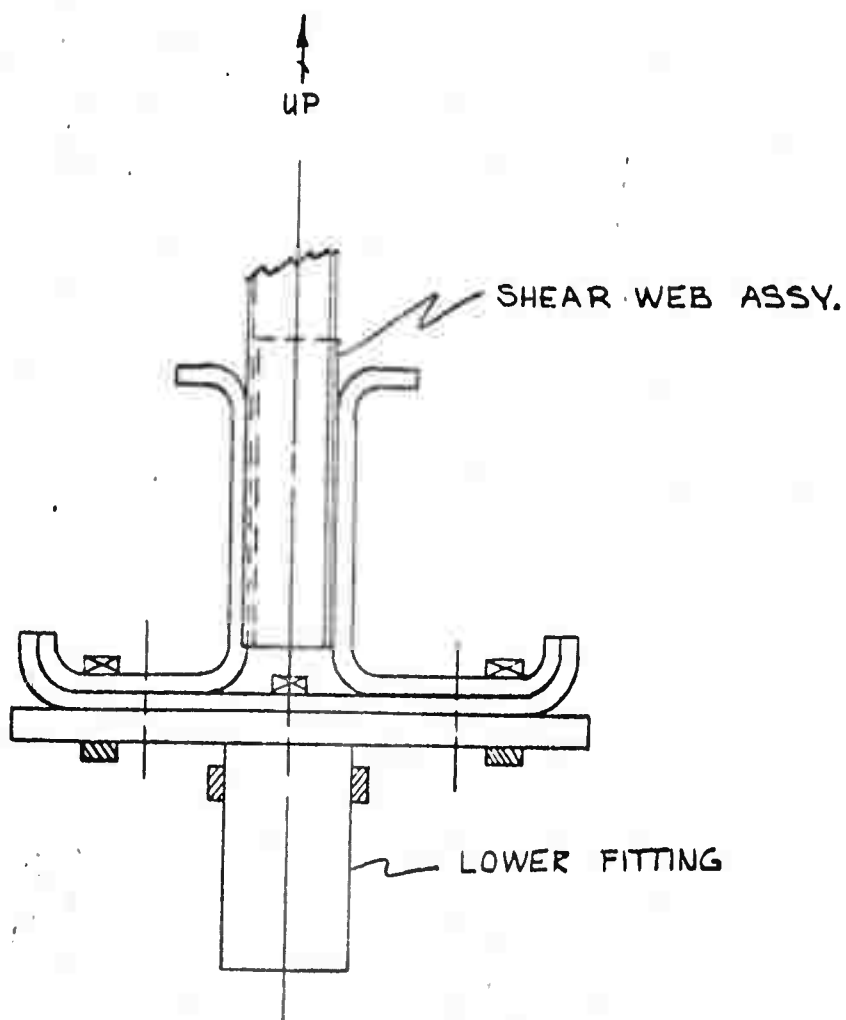
<div> <div> Difference btw'n Location thermocouples fittings on "A" "B" which temp. must be controlled </div> <div>1</div> </div>	MAX. Temp. difference allowable during heat up	MAX. Temp. difference allowable during load application
Lower Fitting	250°F	175°F
Shear Fitting	200°F	175°F
Upper Fitting	250°F	175°F

TABLE 2

Control thermo- couple number	100°F Gradient	200°F Gradient	300°F Gradient
2	Base temp. 1750°F	Base temp. 1750°F	Base temp. 1750°F
1	1750°F	1750°F	1750°F
2	1711°F	1672°F	1633°F
3	1708°F	1654°F	1606°F
4	1698°F	1646°F	1594°F
5	1689°F	1628°F	1567°F
6	1650°F	1550°F	1450°F

1 See Fig. 3 for thermocouple locations.

2 See Fig. 4 for thermocouple locations.

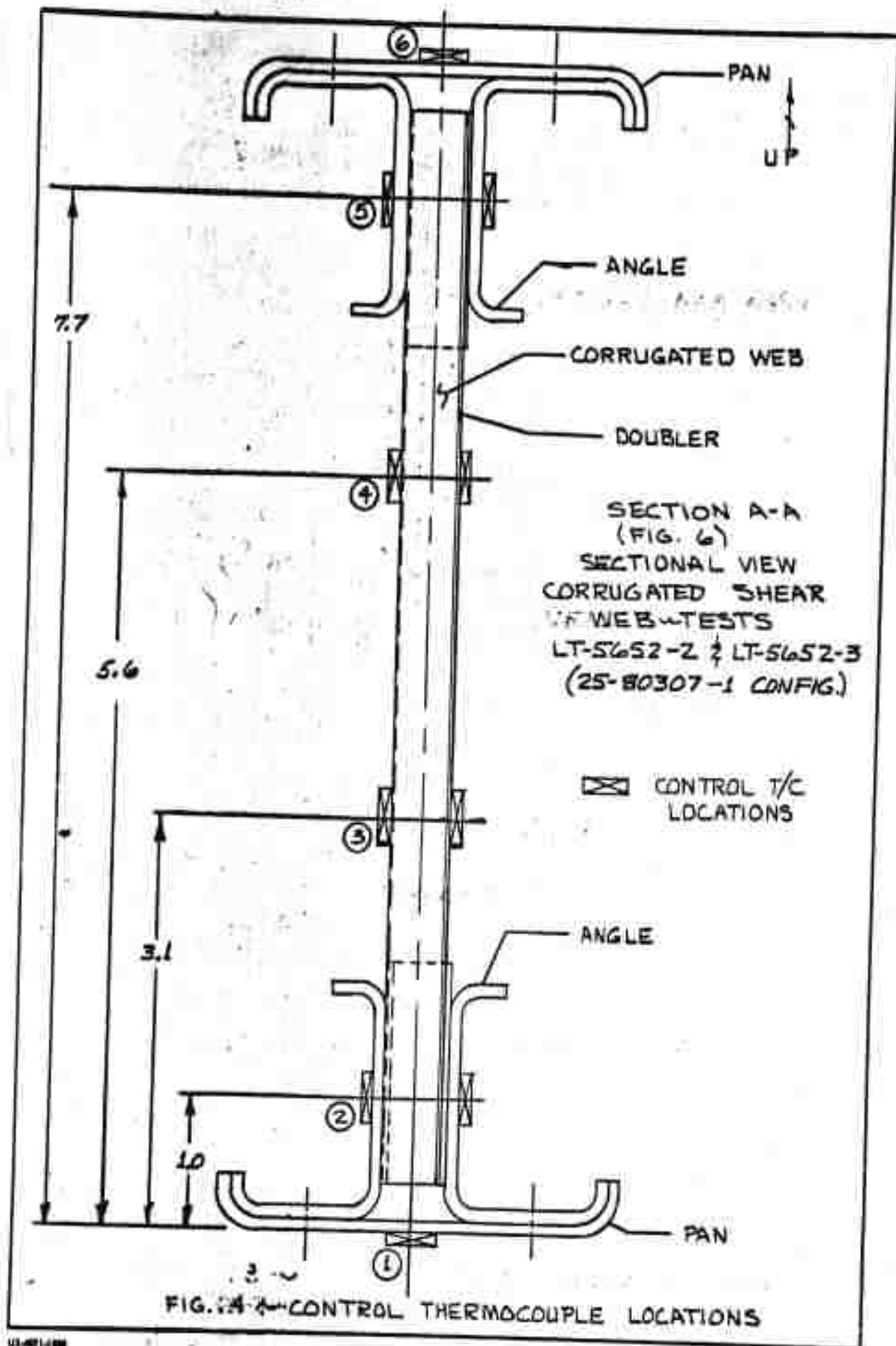


SECTION B-B
(SEE FIG. 16)

TESTS - LT-5652-2 & LT-5652-3

 CONTROL THERMOCOUPLES "A"
 CONTROL THERMOCOUPLES "B"

FIG. 31-4 CONTROL THERMOCOUPLE LOCATIONS



U3-8081-000

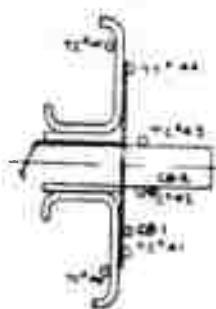
2-1

[illegible]

NO. LT5-652-2-1, LT5-652-3-1 & 2.

(SEE \triangleright FOR THERMOCOUPLE CHANGES ON TESTS LT5-652-3-9 (ON))

2



SECT C-C
(FULL SIZE)

REVISED 6-1-62

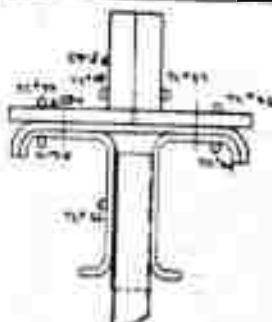
ADDED SECTIONS AA, BB, CC, ALSO ADDED THERMOCOUPLES #34 THRU #45. MOVED THERMOCOUPLES #1, #2 TO OUTSIDE SURFACES OF PANEL

ADDED CONTROL TCPL'S FOR LT-3 TESTS. ADDED NOTE FOR INSTALLATION OF TCPL'S #27 & #28. REMOVED TCPL #28.

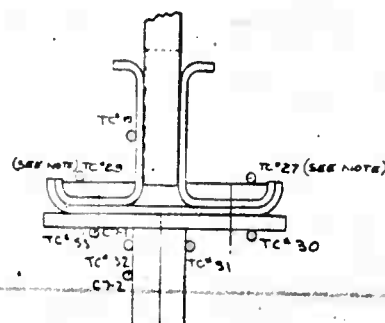
K. DARCY 6-7-62

ADDED DETAIL I AND CHANGING THERMOCOUPLES #1 THRU #12 LOCATIONS

N. TOBER 6-24-62 K. DARCY 6/24/62



SECT B-B
(FULL SIZE)



SECT A-A
(FULL SIZE)

NOTE:

ALL THERMOCOUPLES LOCATED ON CORRUGATED PANELS SHALL FALL ON \bar{C} OF CORRUGATION.

TCPL'S #27 & #28 ARE TO BE INSTALLED AFTER THE LOAD FITTING HAS BEEN BOLTED ON.

ON TEST PANELS LT5-652-3-3 AND REMAINING TESTS, THERMOCOUPLES #1 THRU #12 ARE MOVED TO THE \bar{C} OF THE CORRUGATION AT 16.00 INCHES AS SHOWN IN DETAIL I.

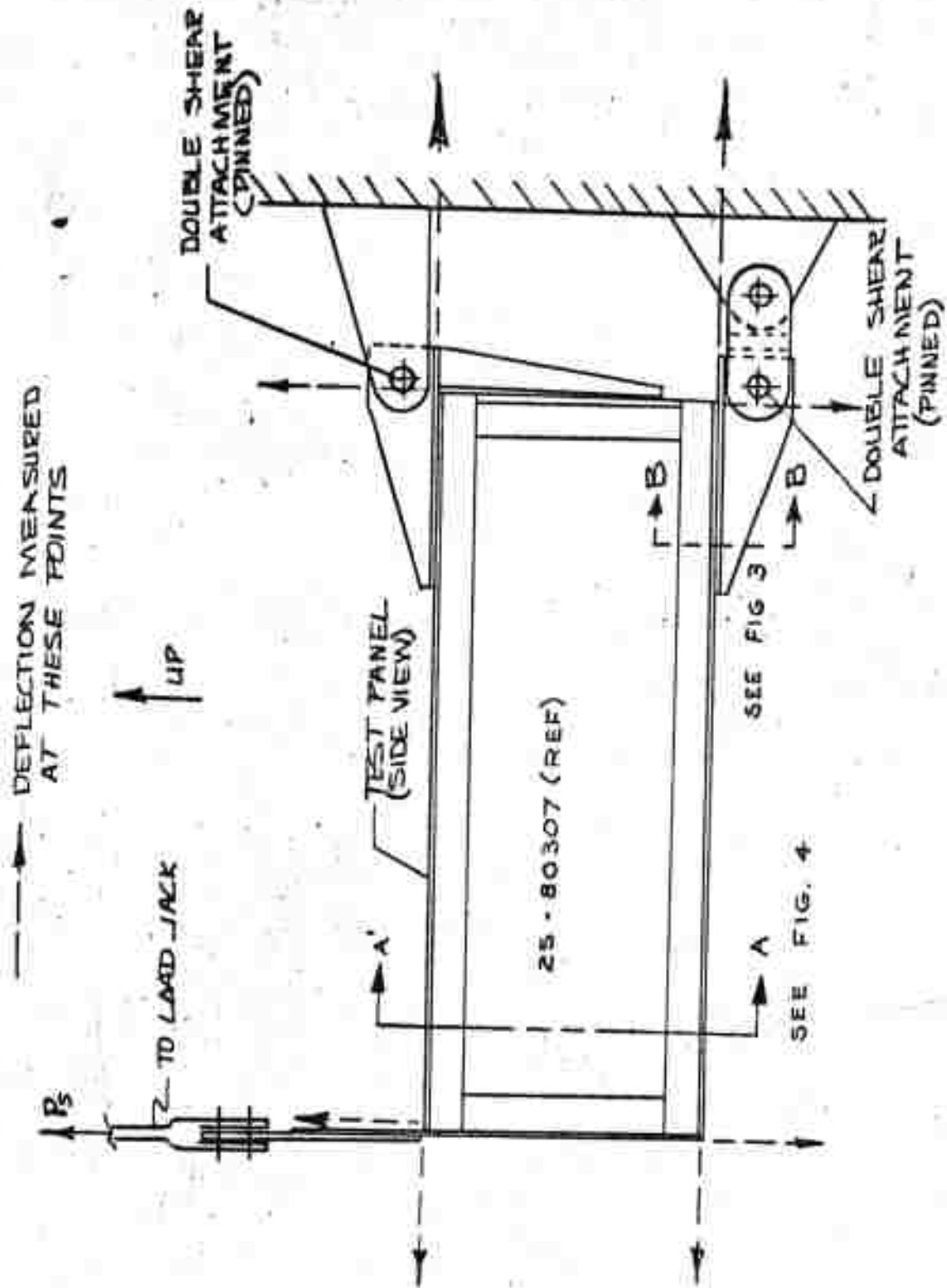
IONS FOR TEST PANELS

-3-1 & 2.

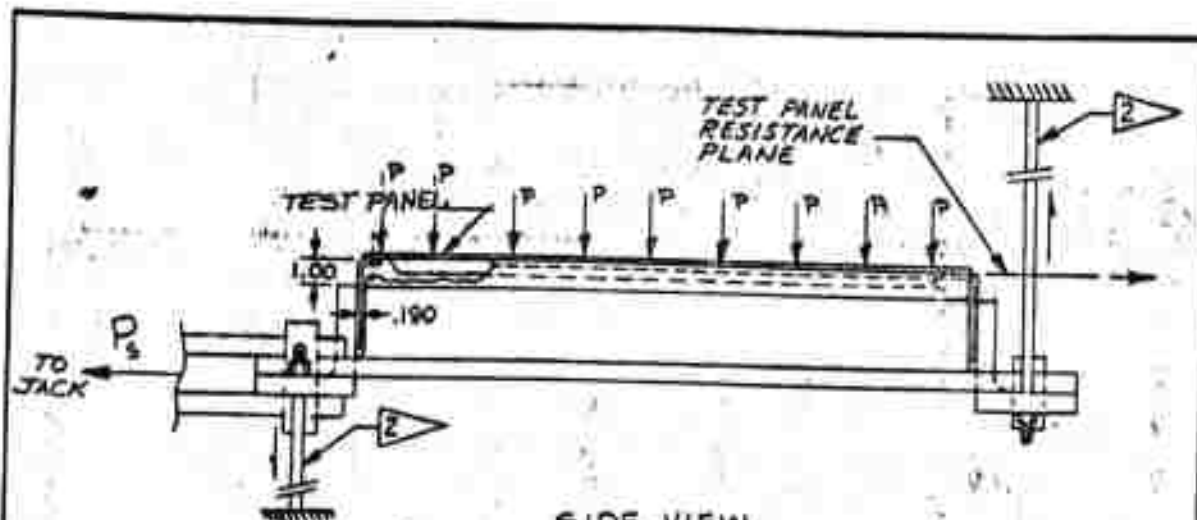
ES ON TESTS LT5-652-3-3 (ON)

				<p>SK11-1436</p>
--	--	--	--	------------------

D2-80081
FIG. 5

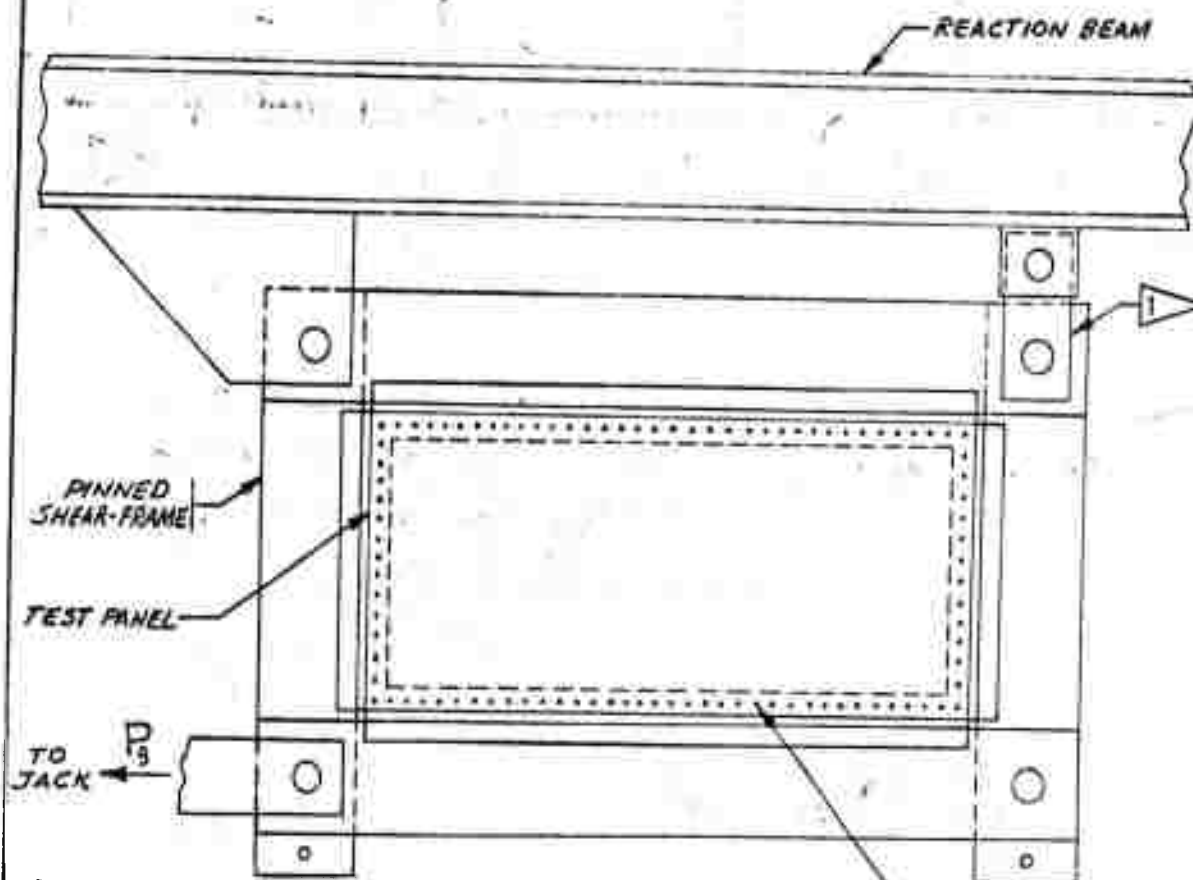


CALC	JPO	5-1-3	REVISED	DATE	SHEAR LOADING SCHEME CORRUGATED SHEAR WEB TESTS STRUCTURAL ELEMENTS - LT-1, 2 & 3 THE BOEING COMPANY	EWA 5-652
CHECK	ERO					D2-80081
APR						
APR						
						PAGE FIG. 6



SIDE VIEW

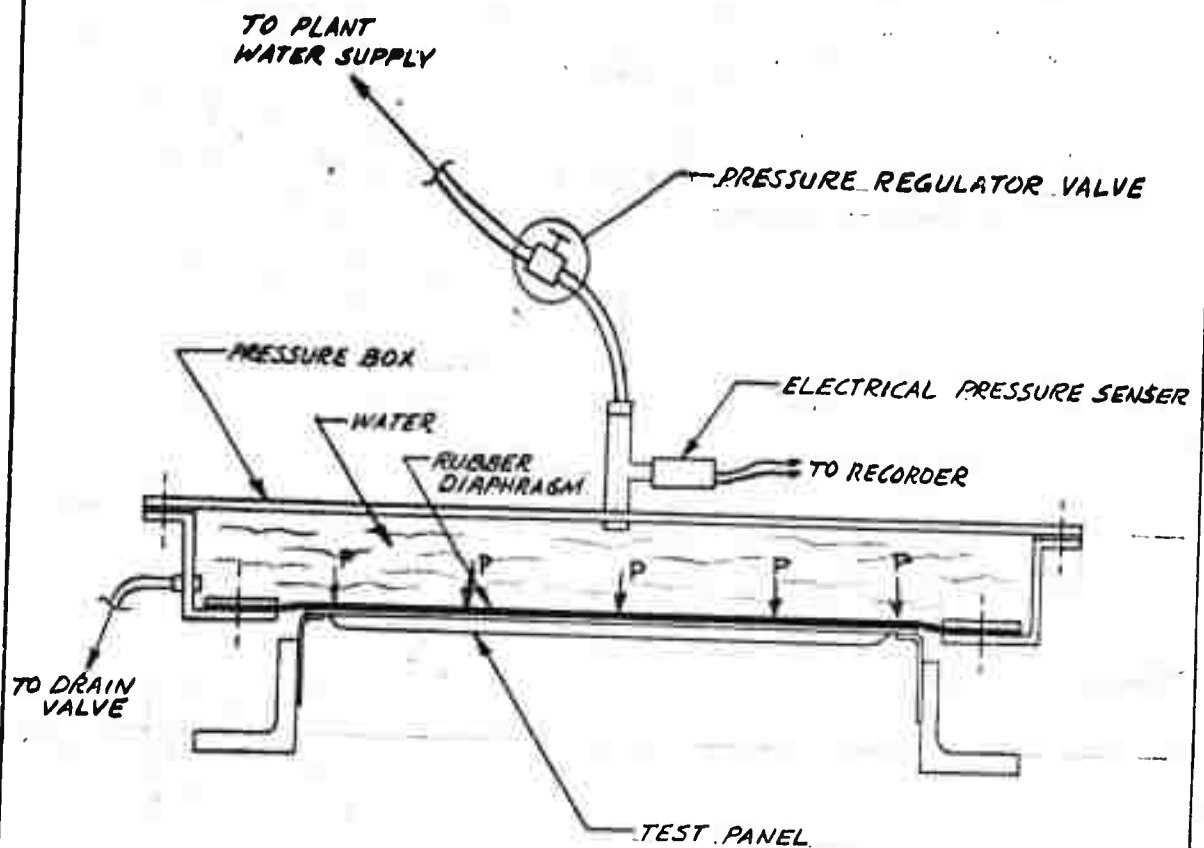
2 THESE RODS RESIST THE COUPLE FORMED BY THE JACK LOAD AND THE TEST PANEL RESISTANCE, KEEPING THE PANEL SURFACE IN A PLANE



PLAN VIEW

1 STRAP, PIN-CONNECTED BOTH ENDS TO PROVIDE REACTION NORMAL ONLY TO JACK LOAD LINE.

CALC	EKA	6-11-62	REVISED	DATE	SHEAR LOADING SCHEME CORRUGATED SHEAR-WEB TESTS CONTROL SURFACE PANELS LT-6	EWA 5-652
CHECK	J.P.O.	5-1-63				D2-80081
APPD					BOEING AIRPLANE COMPANY	PAGE 1
APPD						FIG. 7

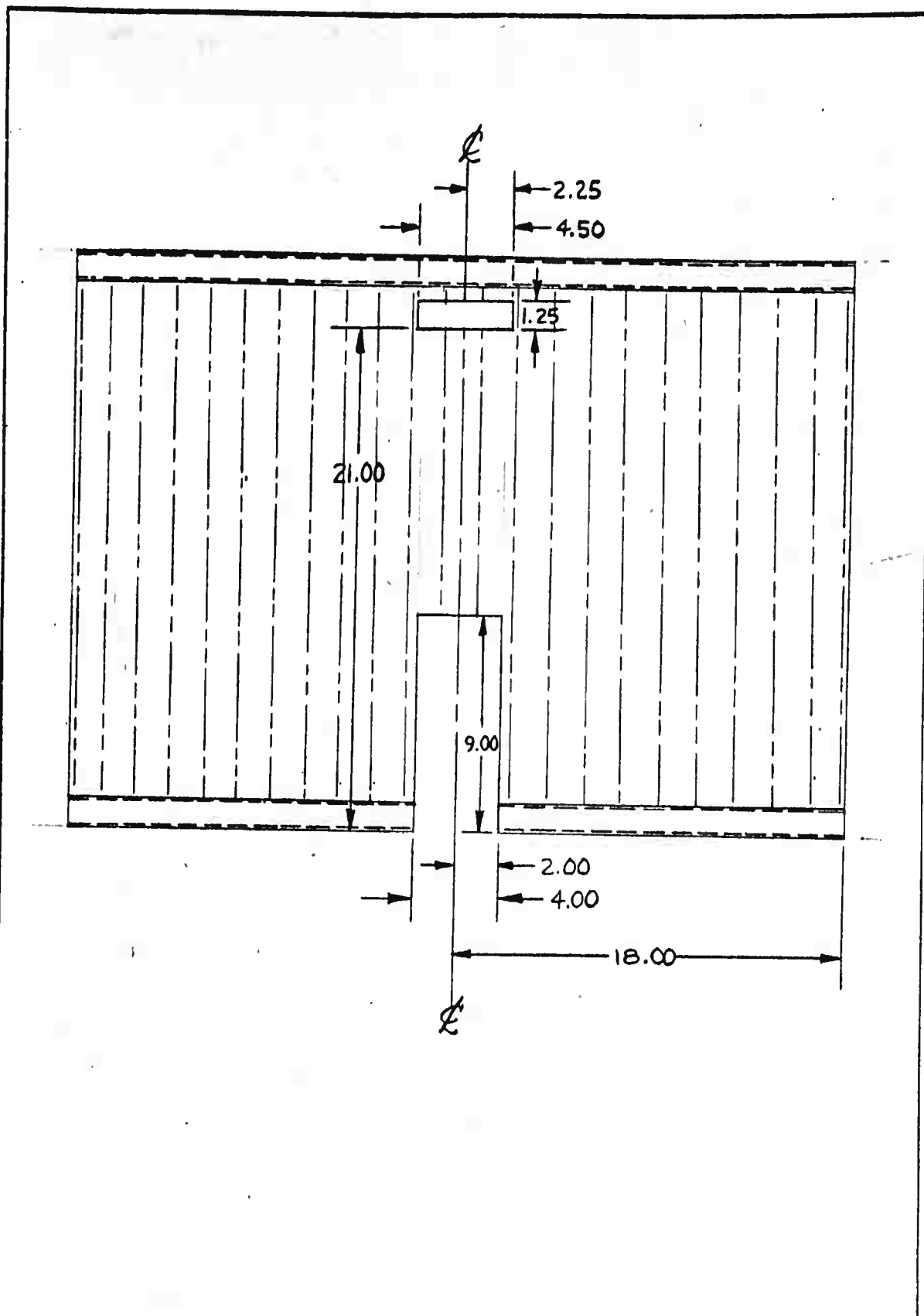


NOTE: THE PRESSURE LOAD WAS REACTED THROUGH VERTICAL RODS FROM THE SHEAR FRAME TO OVERHEAD BEAMS AND FROM THE PRESSURE BOX TO THE FLOOR RAILS. NO LATERAL RESTRAINT WAS OFFERED BY THESE RODS.

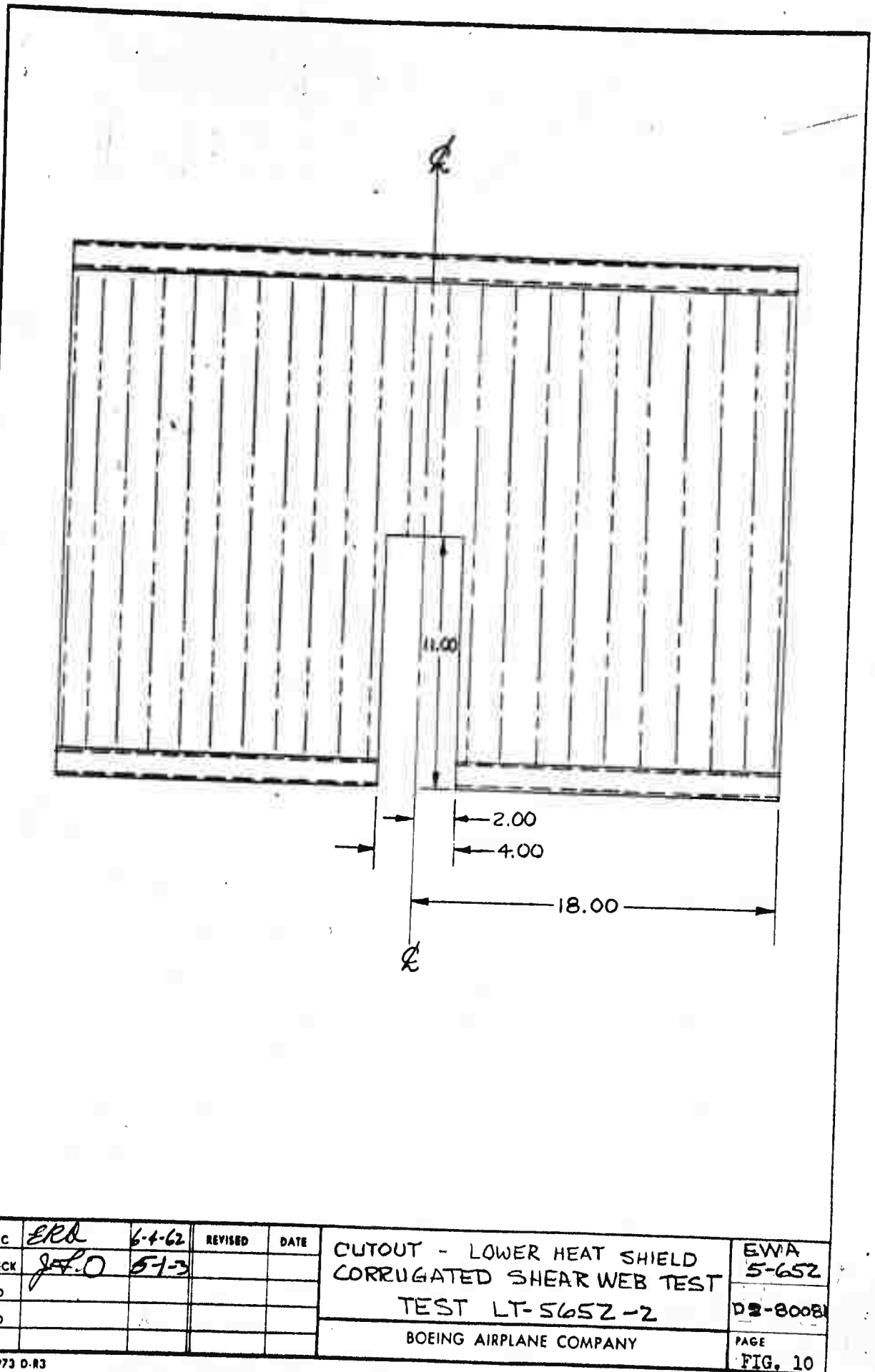
CALC	EKO	6-12-62	REVISED	DATE	PRESSURE LOAD SYSTEM CORRUGATED SHEAR-WEB TESTS CONTROL SURFACE PANELS ~LT-6 BOEING AIRPLANE COMPANY	EWA 5-652
CHECK	J.L.O.	5-1-63				D2-80081
APPD						
APPD						
						PAGE FIG. 8

BAC 973 D-R3

2-7000

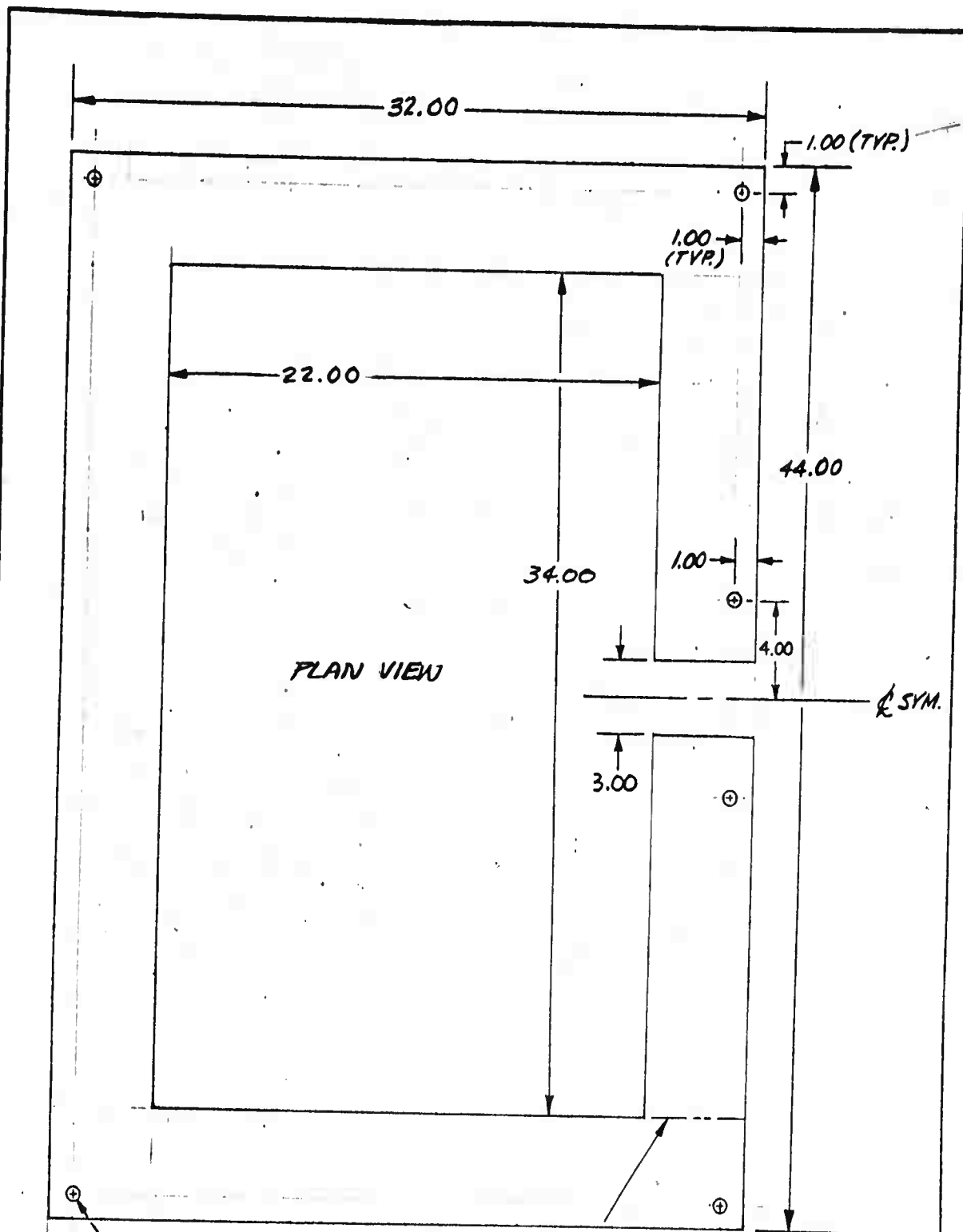


CALC	ERA	6-4-62	REVISED	DATE	CUTOUTS - UPPER HEAT SHIELD CORRUGATED SHEAR WEB TEST TEST LT-5652-2	EWA 5-652
CHECK	5-4737					
APPD	JFO	5-1-3				DZ-80081
APPD						PAGE FIG. 9
					BOEING AIRPLANE COMPANY	



BAC 973 D-R3

2-7000

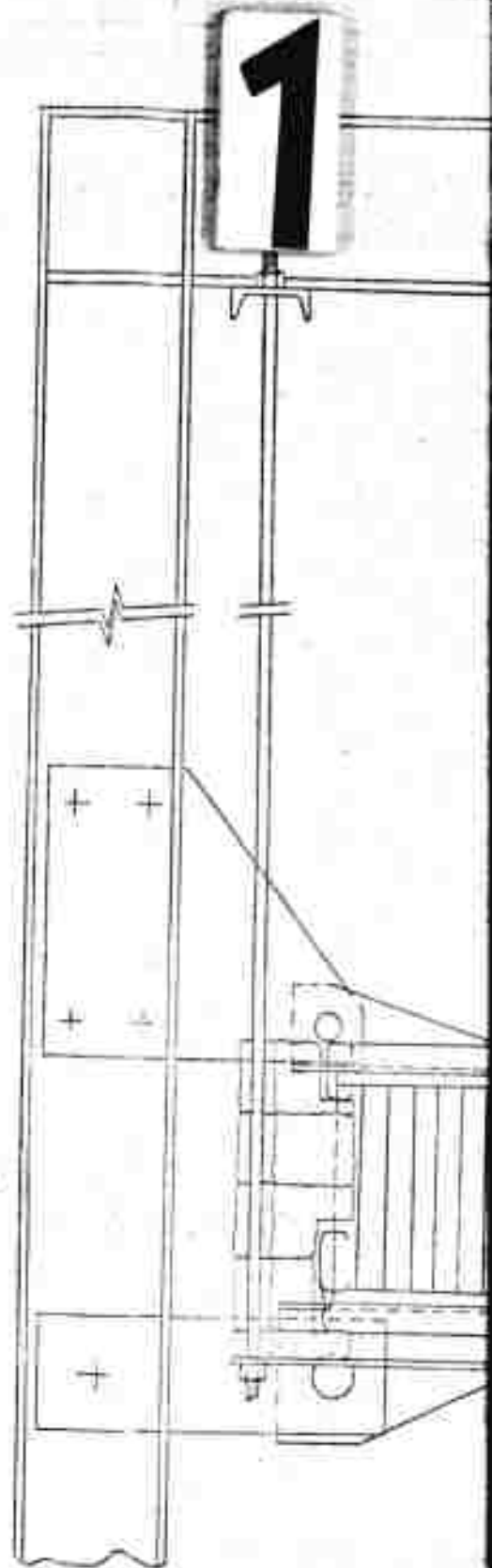
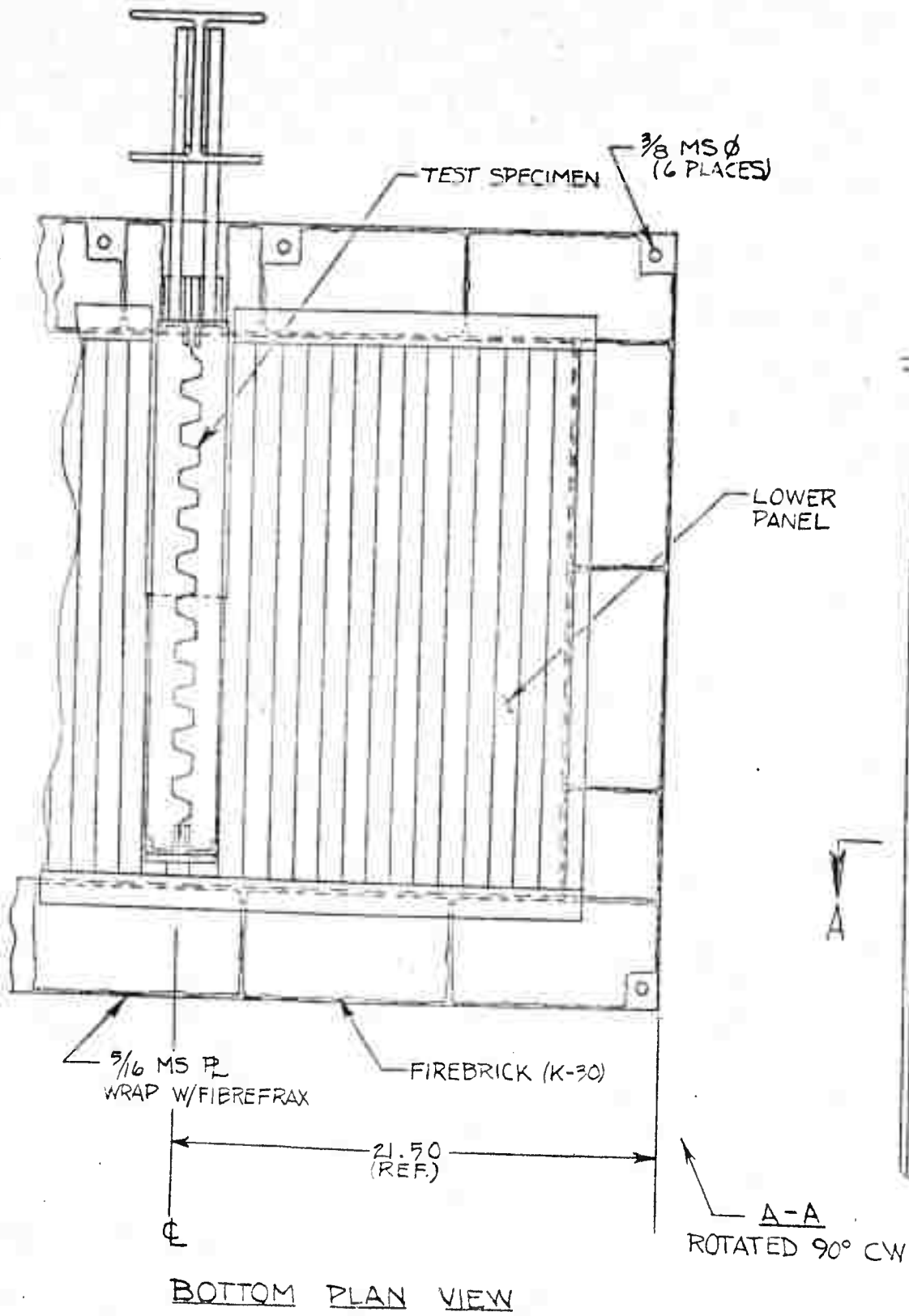


3/8 DIA. HOLE
(6 PLACES)

BUTTWELDED SEAM CONST.
OPTIONAL. GRIND WELDS
SMOOTH ON ONE SIDE.

(NOTE - FIREBRICK STACKED ON RING TO SURROUND SPEC.)

CALC	EDD	6-4-62	REVISED	DATE	FIREBRICK SUPPORT RING	EWA
CHECK	JLO	5-1-5			CORRUGATED. SHEAR WEB TEST	5-652
APPD					TEST LT-5652-21	DZ-80081
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 11



SCALE 1/6

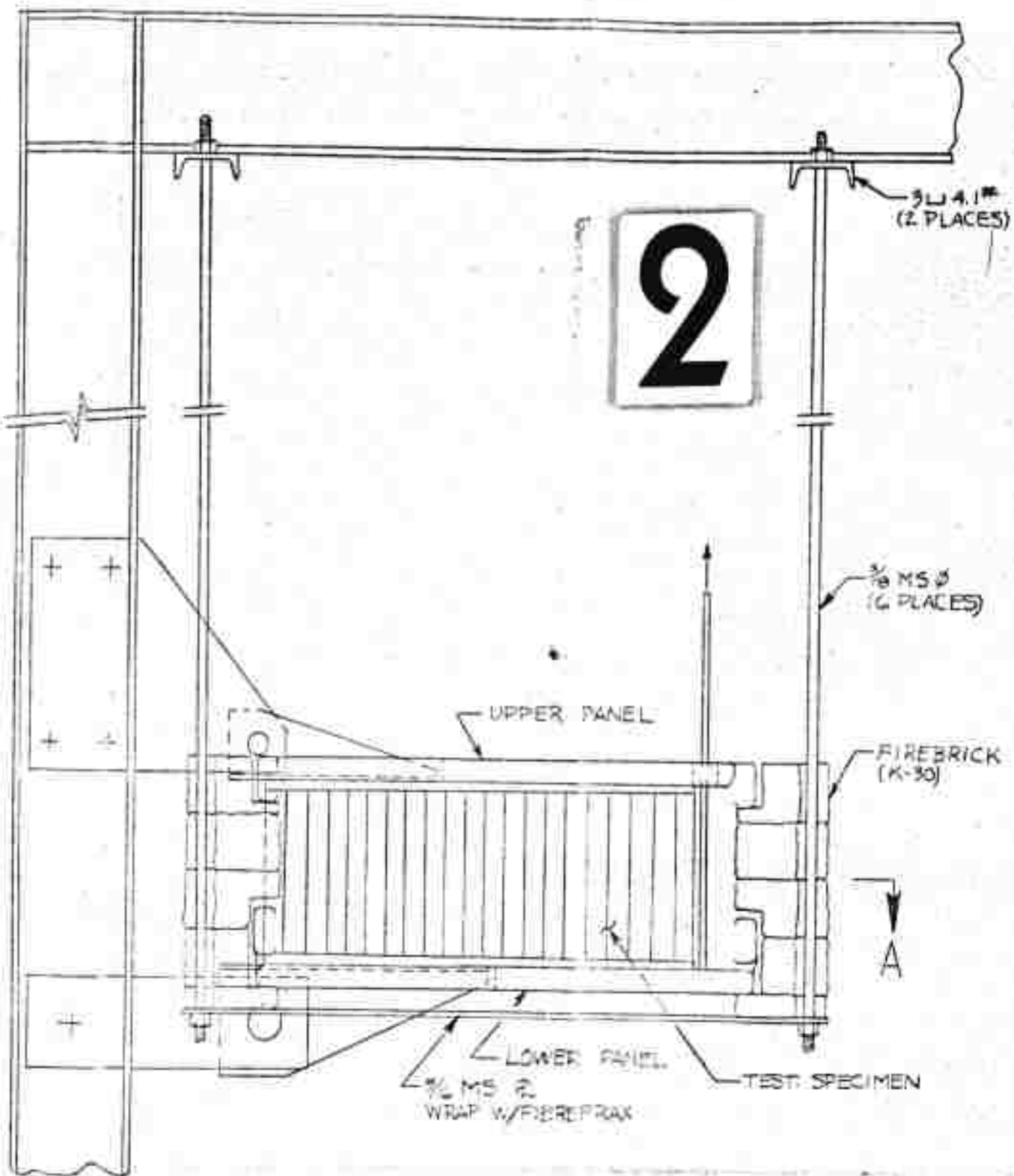
CALC	STRICKLAND	7/8/63	REVISED
CHECK	J.L.O.	5-8-63	
APR.	90	5-8-63	
APR.			

8
(CES)

LOWER
PANEL

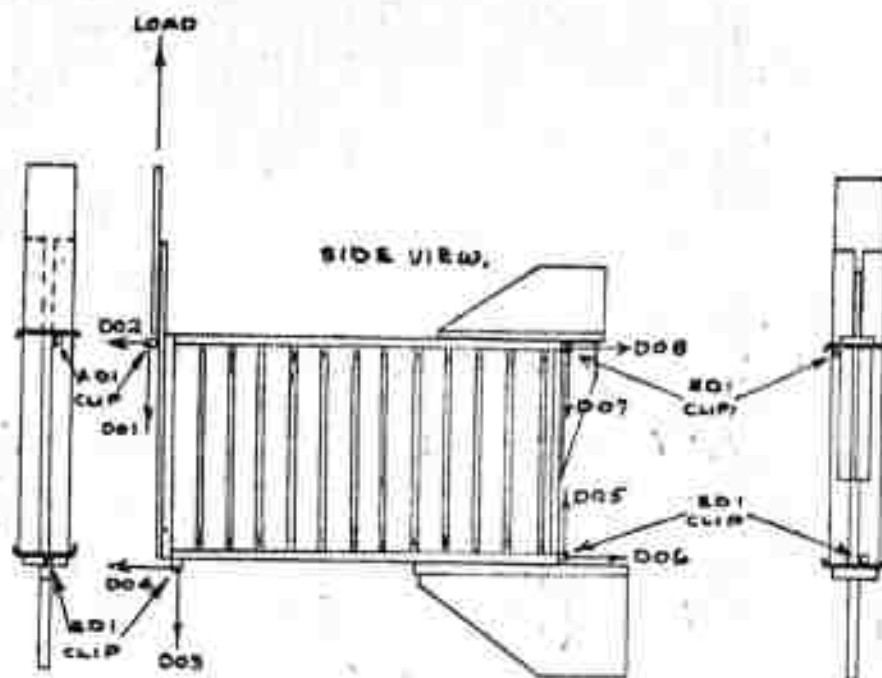
A

A-A
ROTATED 90° CW



SCALE 1/6

CALC	STRICKLAND	7/8/63	REVISED	DATE	ELEV. TEMP. TEST INSTALLATION	EWA
CHECK	J.L.O.	5-5-3			CORRUGATED SHEAR WEB TEST	5-652
APR.	90	5-8-3			LT-5652-2	DZ-80031
APR.					THE BOEING COMPANY	PAGE
					SEATTLE 24, WASHINGTON	FIG. 12

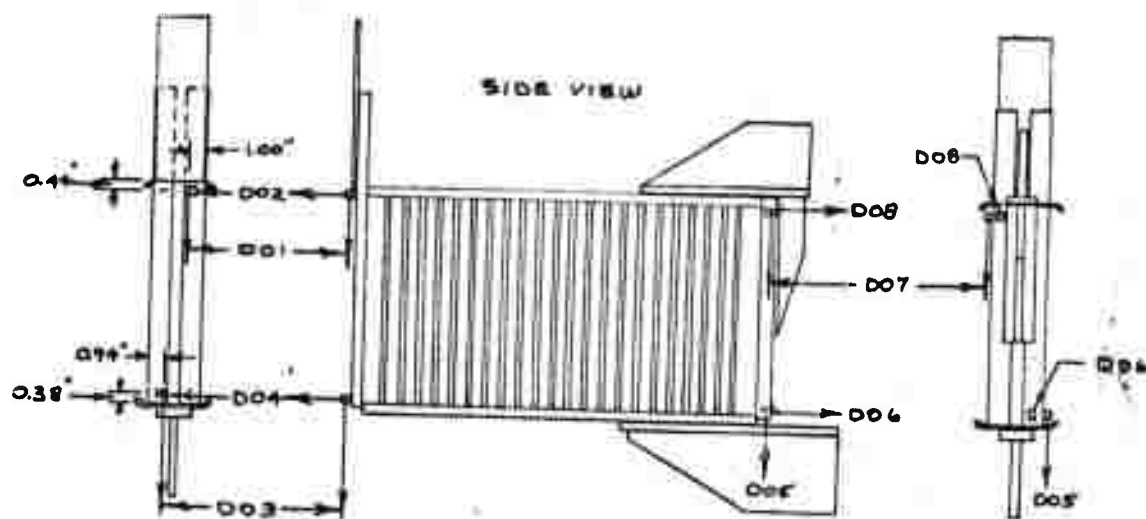


NOTE: EDI CLIPS ARE SPOTWELDED ONTO SPECIMEN AND ARE LOCATED AS CLOSE TO THE CENTERLINE OF THE THICKNESS OF THE PANEL AS POSSIBLE. ARROWS DRAWN FROM CLIP LOCATIONS INDICATE DIRECTION IN WHICH EDI WIRES WERE STRUNG.

SIGN CONVENTION: (REFER TO SIDE VIEW):

D01 - POSITIVE DEFLECTION IS UP.
D02 - " " " TO THE RIGHT.
D03 - " " " UP.
D04 - " " " TO THE RIGHT.
D05 - " " " DOWN.
D06 - " " " TO THE LEFT.
D07 - " " " UP.
D08 - " " " TO THE LEFT.

CALC	CRAM	6-1-62	REVISED	DATE	DEFLECTION CLIP LOCATIONS DS SHEAR WEB AND PANEL TEST LT-5652-1	EWA 5-652
CHECK	SHIMONO	6-1-62				
APR	Chabon	6/1/62				DZ-80081
APR					THE BOEING COMPANY	PAGE
						FIG. 13

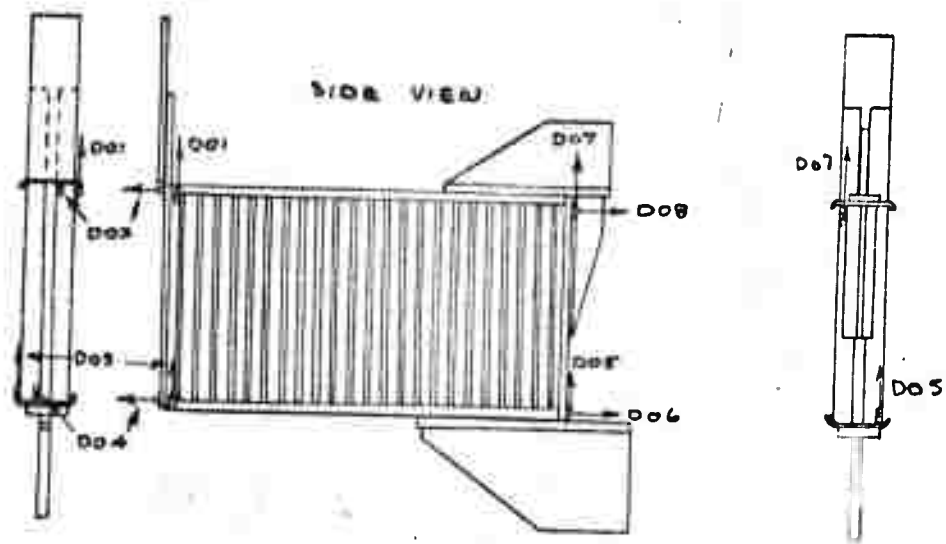


NOTE: EDI CLIPS ARE SPOTWELDED ONTO SPECIMEN. ARROWS DRAWN FROM CLIP LOCATIONS INDICATE DIRECTION IN WHICH EDI WIRES WERE STRUNG.

SIGN CONVENTION (REFER TO SIDE VIEW)

D01 -	POSITIVE DEFLECTION	IS	UP
D02 -	"	"	" TO THE RIGHT
D03 -	"	"	" UP
D04 -	"	"	" TO THE RIGHT
D05 -	"	"	" UP
D06 -	"	"	" TO THE LEFT
D07 -	"	"	" UP
D08 -	"	"	" TO THE LEFT

CALC	CRAM	7-5-62	REVISED	DATE	DEFLECTION CLIP LOCATIONS D.S. SHEAR WEB AND PANEL TEST LT 5652-1-3 THE BOEING COMPANY	EWA 5-652
CHECK						
APR	Chobee	7-5-62				DZ-80081
APR						PAGE FIG. 14

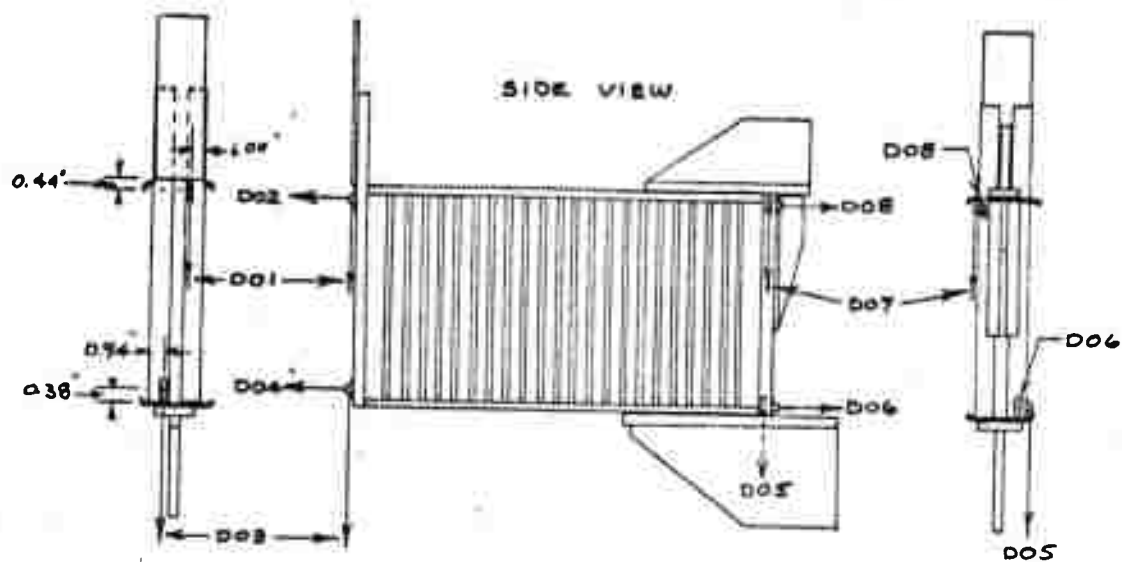


NOTE: EOI CLIPS ARE SPOTWELDED ONTO SPECIMEN. ARROWS DRAWN FROM CLIP LOCATIONS INDICATE DIRECTION IN WHICH EOI RODS WERE STRUNG.

SIGN CONVENTION (REFER TO SIDE VIEW)

D01 - POSITIVE DEFLECTION IS UP.
D02 - " " " TO THE LEFT
D03 - " " " UP
D04 - " " " TO THE LEFT
D05 - " " " UP
D06 - " " " TO THE RIGHT
D07 - " " " UP
D08 - " " " TO THE RIGHT

CALC	CRAM	6-11-62	REVISED	DATE	DEFLECTION CLIP LOCATIONS DS SHEAR WEB AND PANEL TEST LT5652-2 THE BOEING COMPANY	EWA 5-632
CHECK	SHIMONO	6-12-62				
APR	Chabro	6/12/62				DZ-80081
APR						PAGE FIG. 15



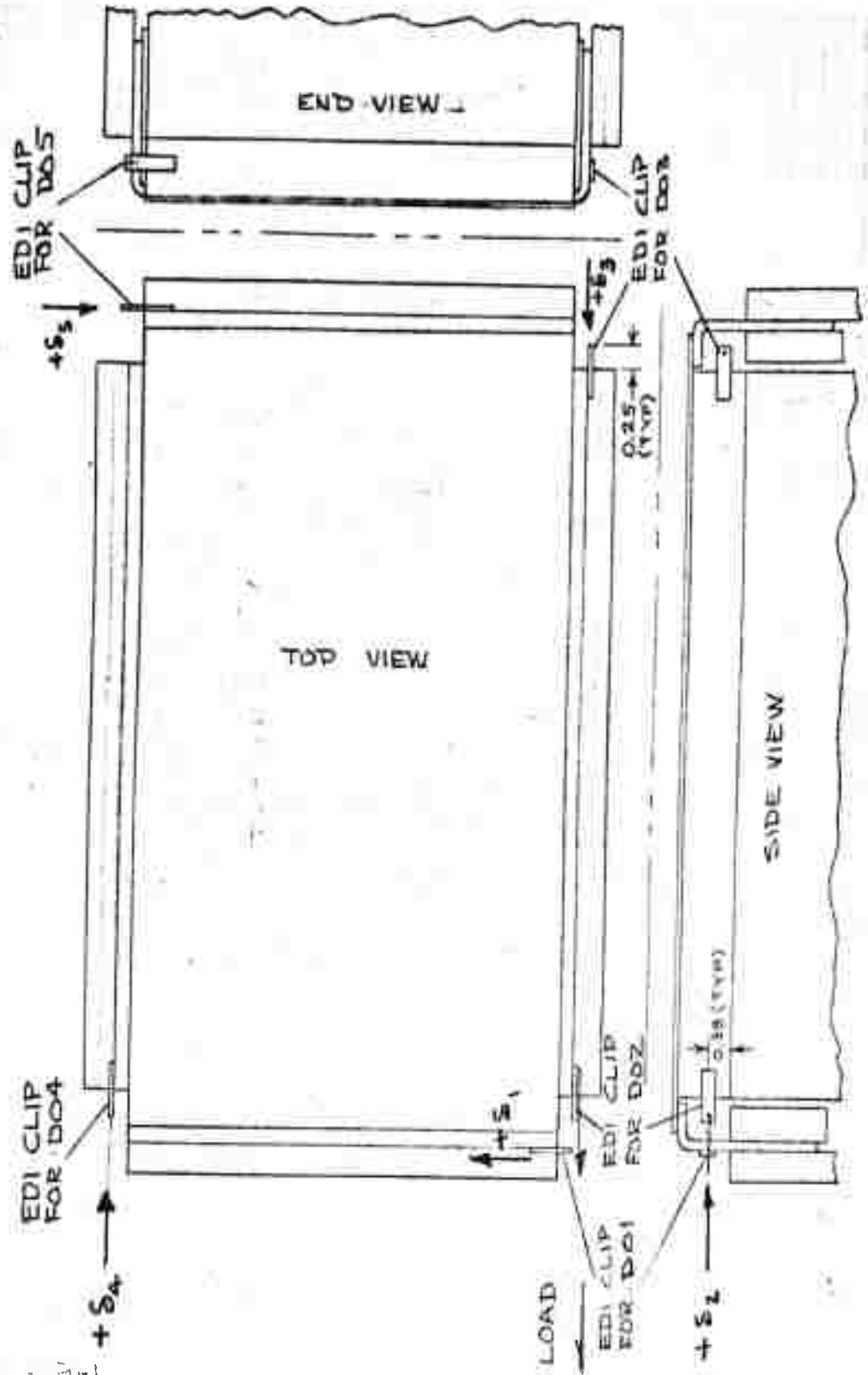
NOTE: EDI CLIPS ARE SPOTWELDED ONTO SPECIMEN. ARROWS DRAWN FROM CLIP LOCATIONS INDICATE DIRECTION IN WHICH EDI RODS WERE STRUNG.

SIGN CONVENTION (REFER TO SIDE VIEW)

D01-	POSITIVE DEFLECTION IS	DOWN
D02-	"	" " TO THE LEFT
D03-	"	" " DOWN
D04-	"	" " TO THE LEFT
D05-	"	" " DOWN
D06-	"	" " TO THE RIGHT
D07-	"	" " DOWN
D08-	"	" " TO THE RIGHT

CALC	CRAM	6-20-62	REVISED	DATE	DEFLECTION CLIP LOCATIONS DS SHEAR WEB AND PANEL TEST LT 5652-3 THE BOEING COMPANY	EWA 5-652
CHECK	SHIMONO	6-20-62				DZ-80081
APR	<i>Chloe</i>	6/20/62				PAGE
APR						FIG. 16

SPOT-WELD EDI CLIPS TO SPECIMEN



CALC	SHIMONO	4/10/62	REVISED	DATE	EDI CLIP LOCATIONS CORRUGATED SHEAR WEB & PANEL TEST, ~LT-5652 -6	EWA 5-652
CHECK						DZ-80081
APR	Clover	4/11/62			THE BOEING COMPANY	PAGE FIG. 17
APR						

Z
SYM

EDI CLIP
FOR DO6

EDI CLIP
FOR DO7

EDI CLIP
FOR DO8

BOTTOM VIEW

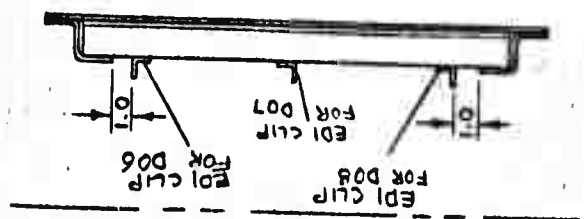
LOAD

E
SYM

POSITIVE
DEFLECTION

PANEL
EDI

TYPICAL EDI LAYOUT

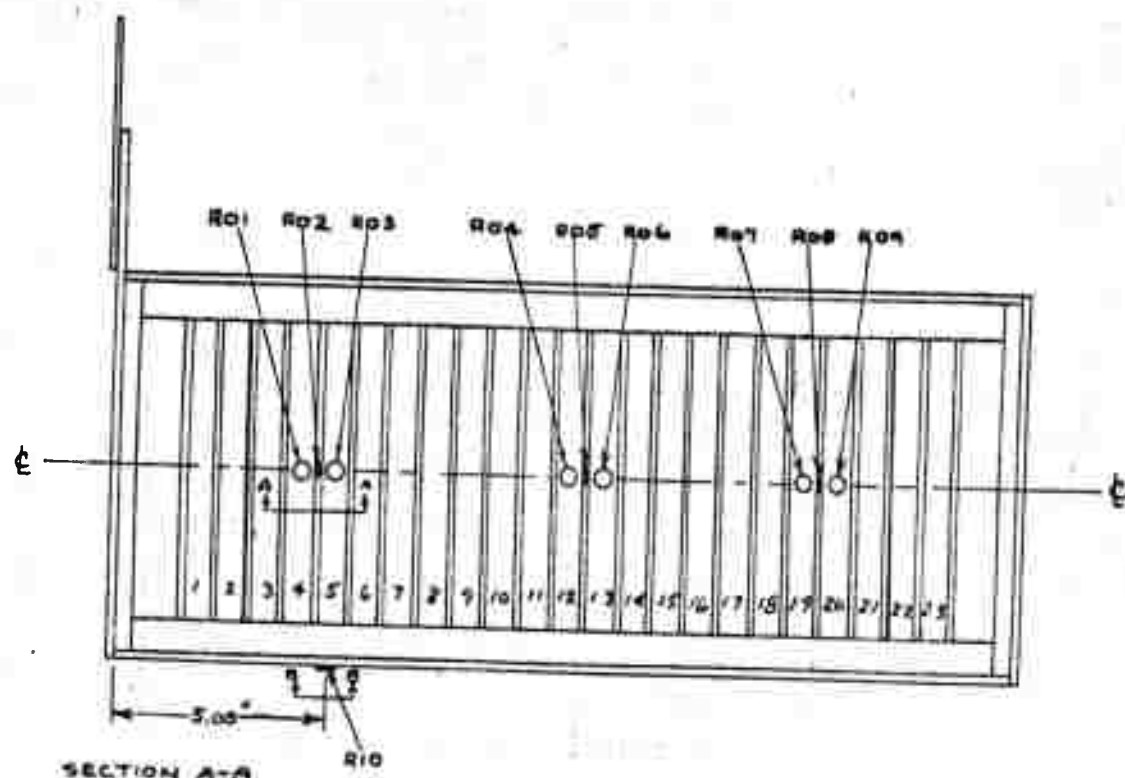


EW 19-Z

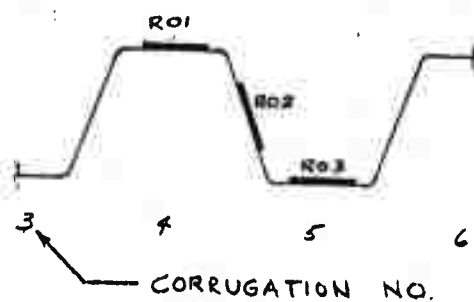
C/S 2-5676 223
2. 10 1. 10

CALC	SHIMONO	3/30/62	REVISED	DATE	EDI CLIP LOCATIONS	EWA
CHECK					CORRUGATED SHEAR WEB $\frac{1}{2}$	5-652
APR	Chamber	4/11/62			PANEL TEST LT-5652-6-1	DZ-80081
APR					THE BOEING COMPANY	PAGE
						FIG. 18

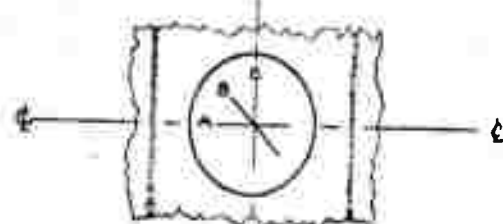
U3 4038 8000



SECTION A-A

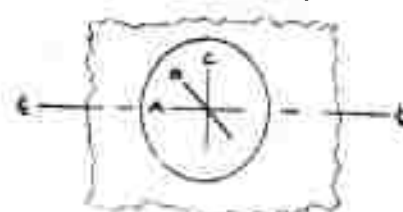


TYPICAL GAGE LOCATION FOR CORRUGATIONS



OF CORRUGATION

SECTION B-B



GAGE INFO.:

TYPE: FABR-12-12 S-6

R: 120.5 ± 0.5 IN.

K: $2.05 \pm 1\%$

LOT: 211-J

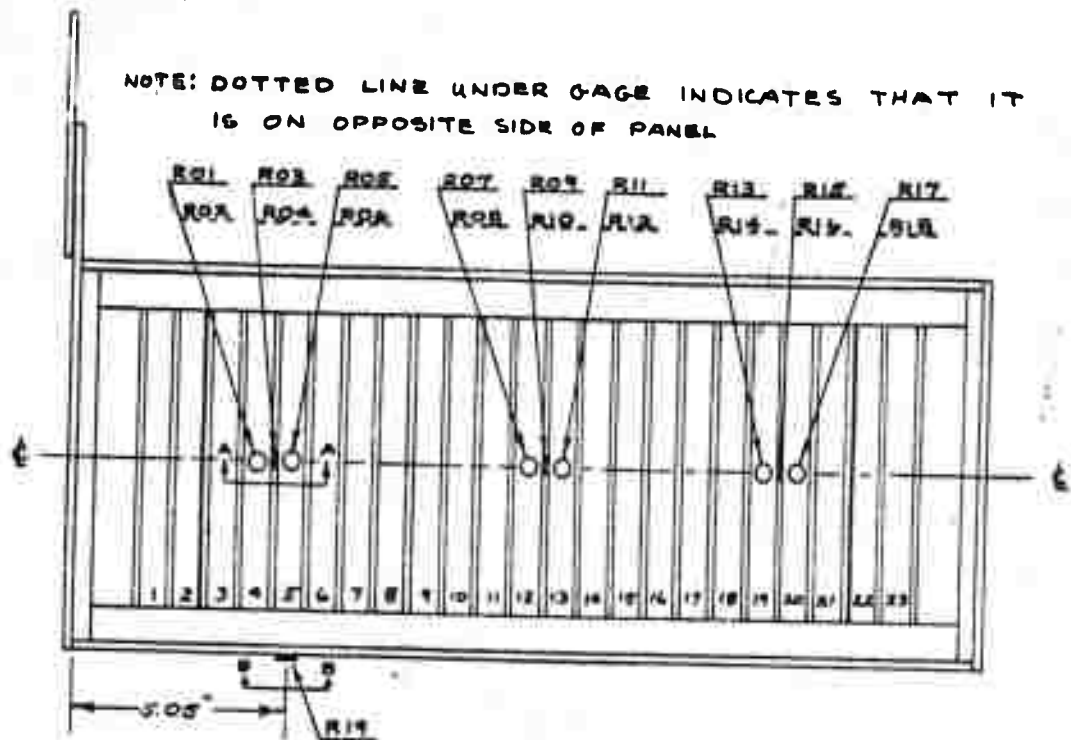
NOTE: FOR INSTALLATION PROCEDURE SEE FIG. 1,
COUNT CORRUGATIONS TO LOCATE GAGES ALONG E. GAGES
RO1, RO4, & RO9 ARE ON CONVEX CORRUGATIONS.

DRAWING NO. EWR 38412-1

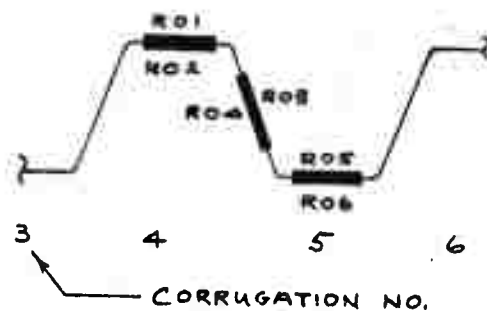
CALC	CRAM	6-2-62	REVISED	DATE	ROSETTE GAGE LOCATIONS DS SHEAR WEB AND PANEL	EWA 5-652
CHECK	SHIMONO	6-2-62				
APR	Chaves	6/2/72			TEST LT-5652-1-2	D2-80081
APR					THE BOEING COMPANY	PAGE FIG. 19

U3 4038 8000

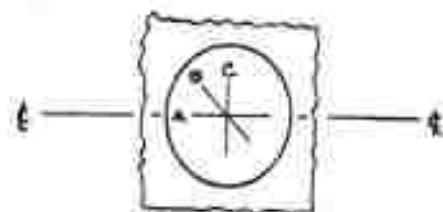
NOTE: DOTTED LINE UNDER GAGE INDICATES THAT IT IS ON OPPOSITE SIDE OF PANEL



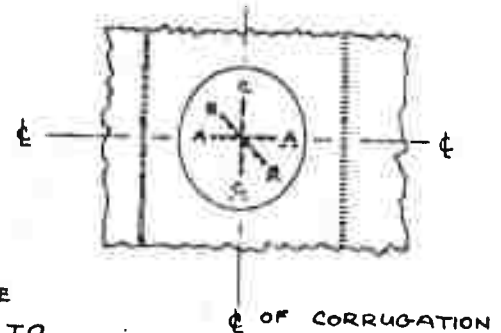
SECTION A-A



SECTION B-B



TYPICAL GAGE LOCATIONS FOR CORRUGATIONS



GAGE INFO.:

TYPE: FABR-12-12 S-6

R: $120.5 \pm 0.5 \Omega$

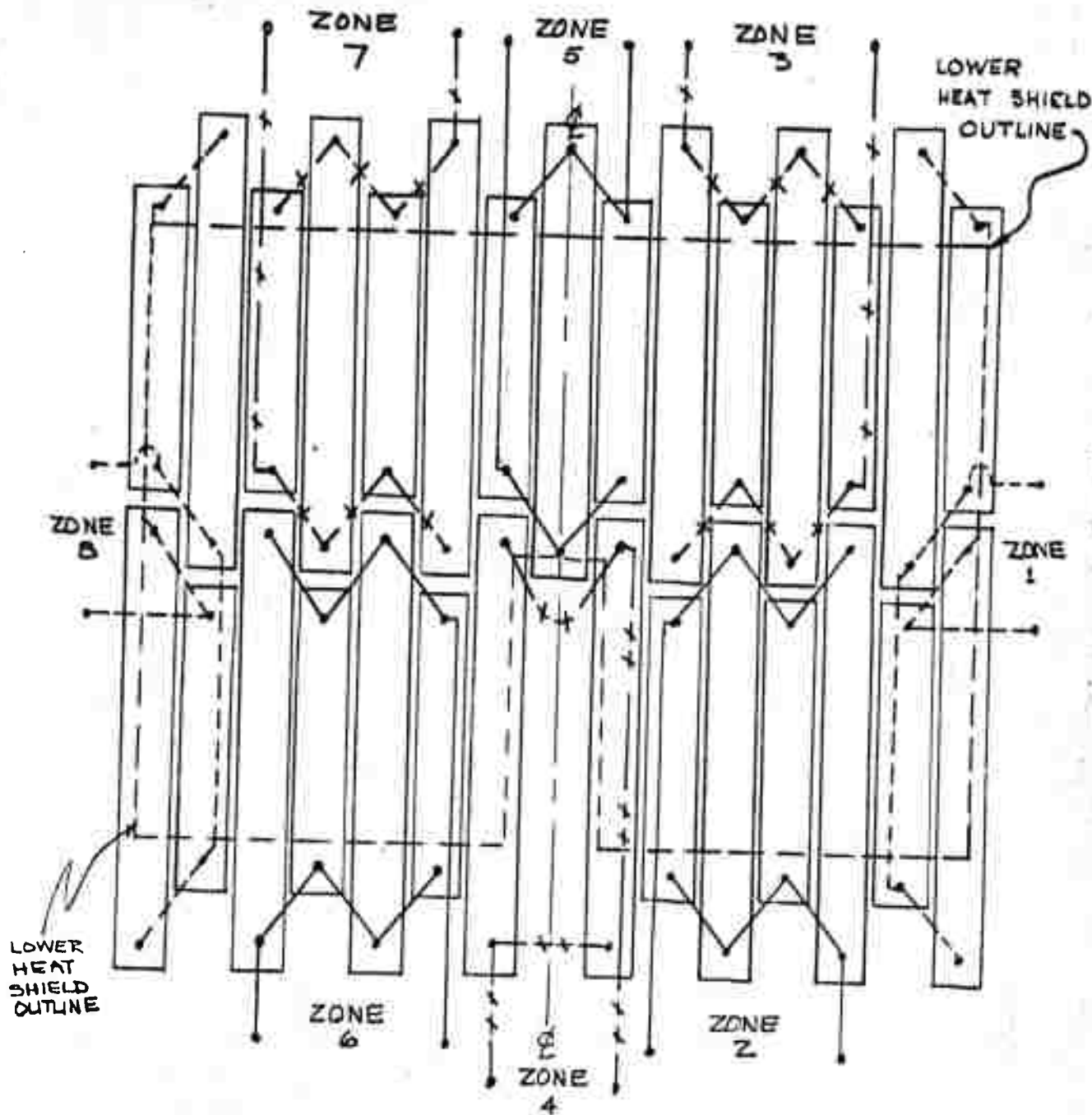
K: $2.05 \pm 1\%$

LOT: 211-J

NOTE: GAGES ARE MOUNTED BACK TO BACK - A TO A, B TO B, & C TO C. FOR INSTALLATION PROCEDURE SEE FIG. 1-1. COUNT CORRUGATIONS TO LOCATE GAGES ALONG C.

EWR 38495-1

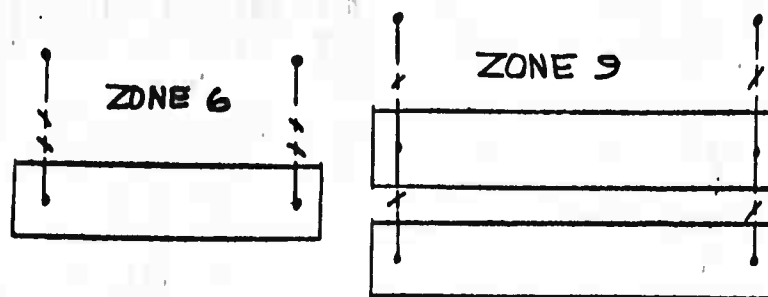
CALC	CRAM	6-21-62	REVISED	DATE	ROSETTE GAGE LOCATIONS	EWA
CHECK					DS SHEAR WEB AND PANEL	5-652
APR	Closter	6/26/62			TEST 5652-1-3	DZ-80081
APR					THE BOEING COMPANY	PAGE
						FIG. 20



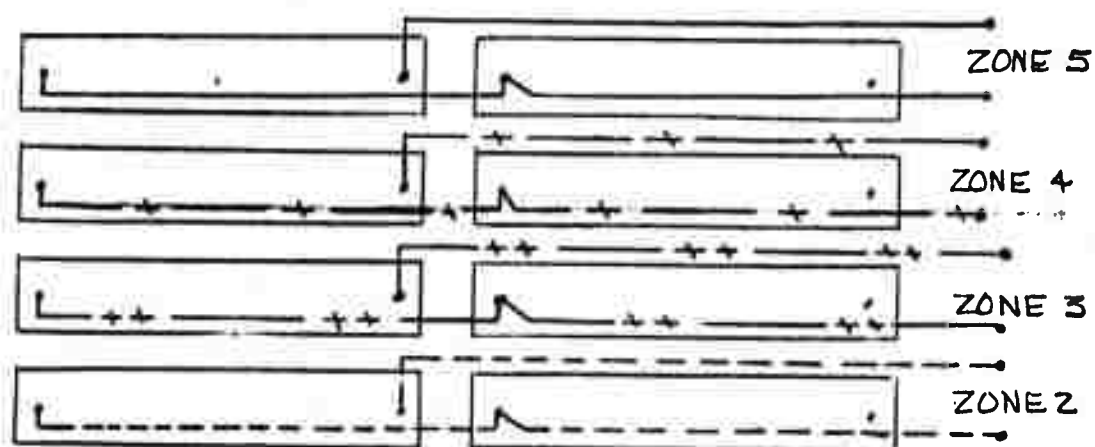
NOTE: LAYOUT OF LAMPS BELOW LOWER HEAT SHIELD, FOR LT-5652-2 TEST ONLY. (SEE FIGS. 27 & 28)

ZONE	1 & 8	---
ZONE	2, 5 & 6	---
ZONE	3 & 7	--- + ---
ZONE	4	--- + + ---

CALC	OLSON	4-30-3	REVISED	DATE	LAMP LAYOUT & WIRING LT-5652-2 ONLY	EWA 5-652
CHECK	EPK					DZ-80081
APR						
APR					THE BOEING COMPANY	PAGE
						FIG. 21

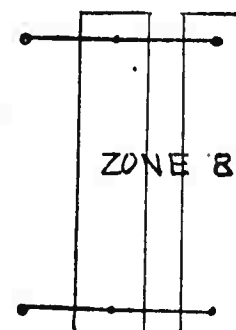


TOP LAMPS ONLY

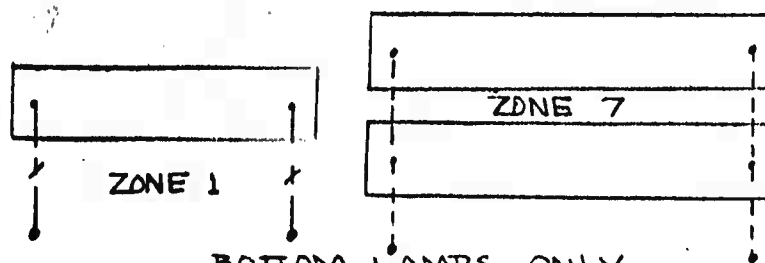


SIDE LAMPS (TYP)

NOTE: LAYOUT OF LAMPS AROUND
 LT-5652-3 TESTS ONLY
 (SEE FIG. 29)
 SIDE ZONE (2)
 DISTRIBUTION



END LAMPS



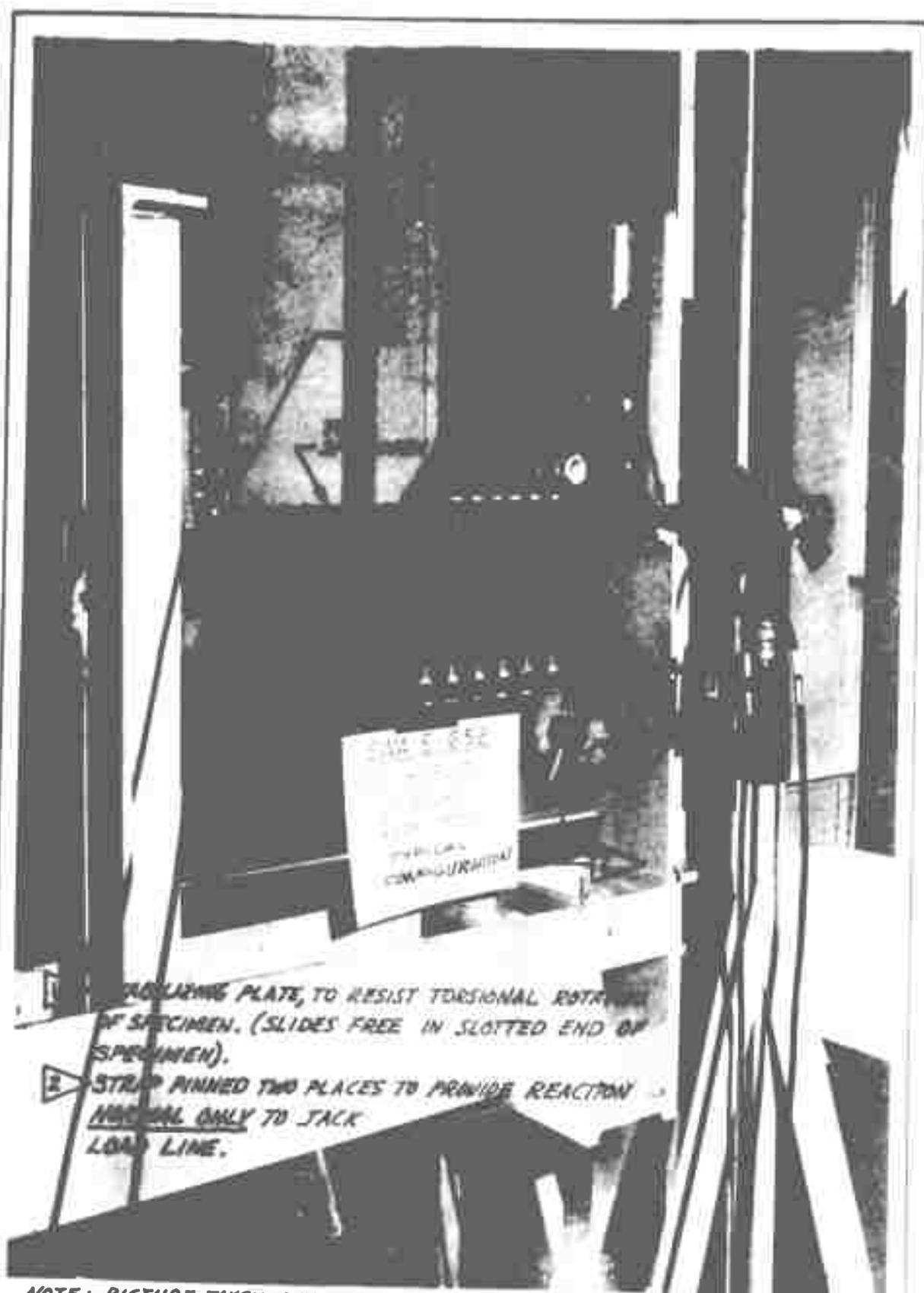
BOTTOM LAMPS ONLY

ZONE 1, 4 & 9 — + —					ZONE 3 & 6 — + + —	
ZONE 2 & 7 — — — — —					ZONE 5 & 8 — — — — —	
CALC	OLSON	5-1-3	REVISED	DATE	LAMP LAYOUT & WIRING LT-5652-3 ONLY FLAT PATTERN THE BOEING COMPANY	EWA 5-652
CHECK	SLP					02-80081
APR						
APR						PAGE FIG. 22

5-652 - 2000 TEMPERATURE MEASUREMENT
 APPROVED SERIAL NO. 1000, TEST 6-1-60

2011699

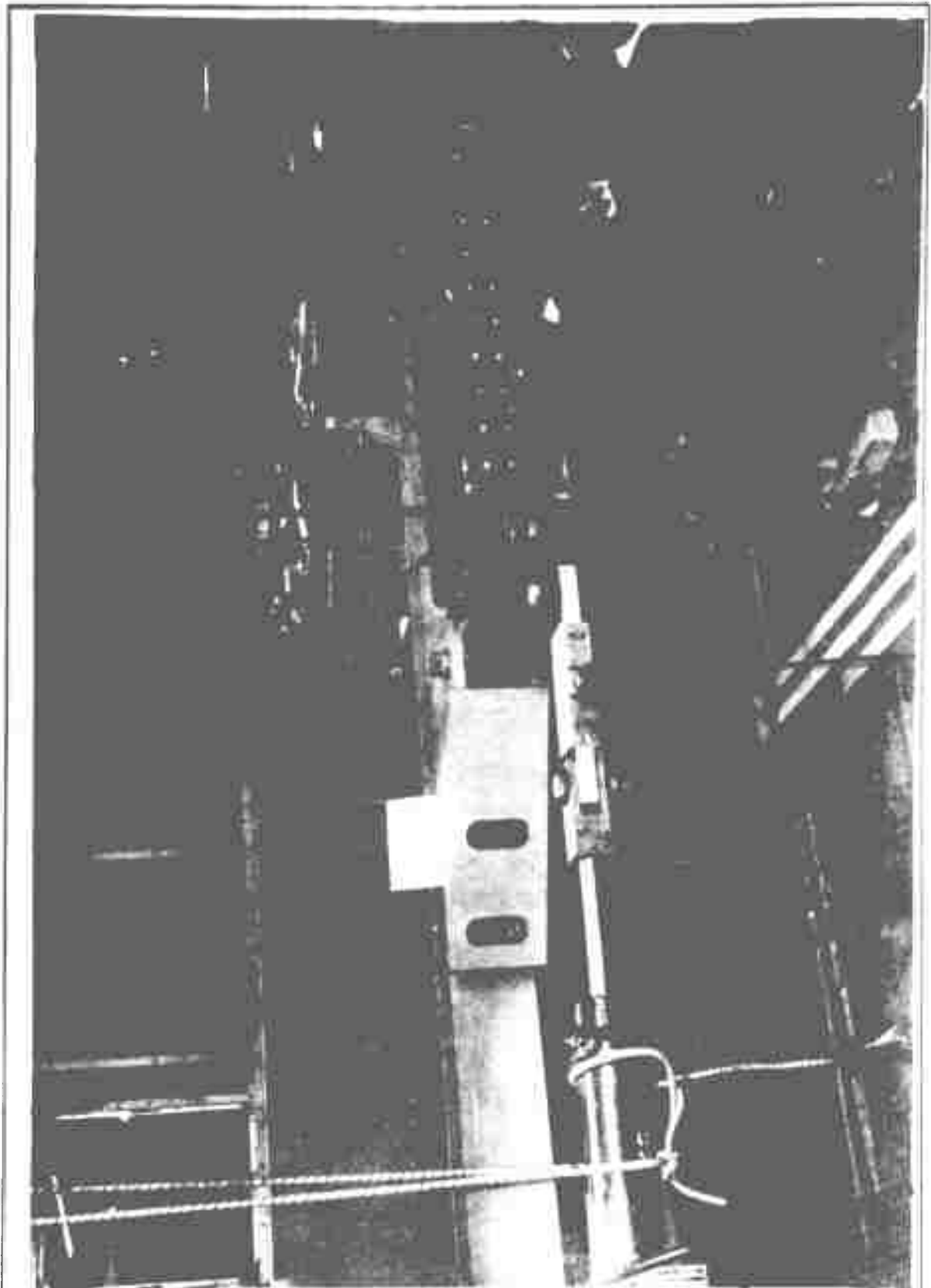
41



NOTE: PICTURE TAKEN AFTER TEST

CALC	ERD	6-15-62	REVISED	DATE	PANEL SUPPORT & LOAD CONFIGURATION CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURE ELEMENTS	EWA 5-652
CHECK						D2-80081
APPD	JLO	4-26-63				PAGE FIG. 23
APPD						BOEING & COMPANY

28-1 CORRUGATED SHEAR WEB PANEL TEST 2400007
25-86 4-27-62

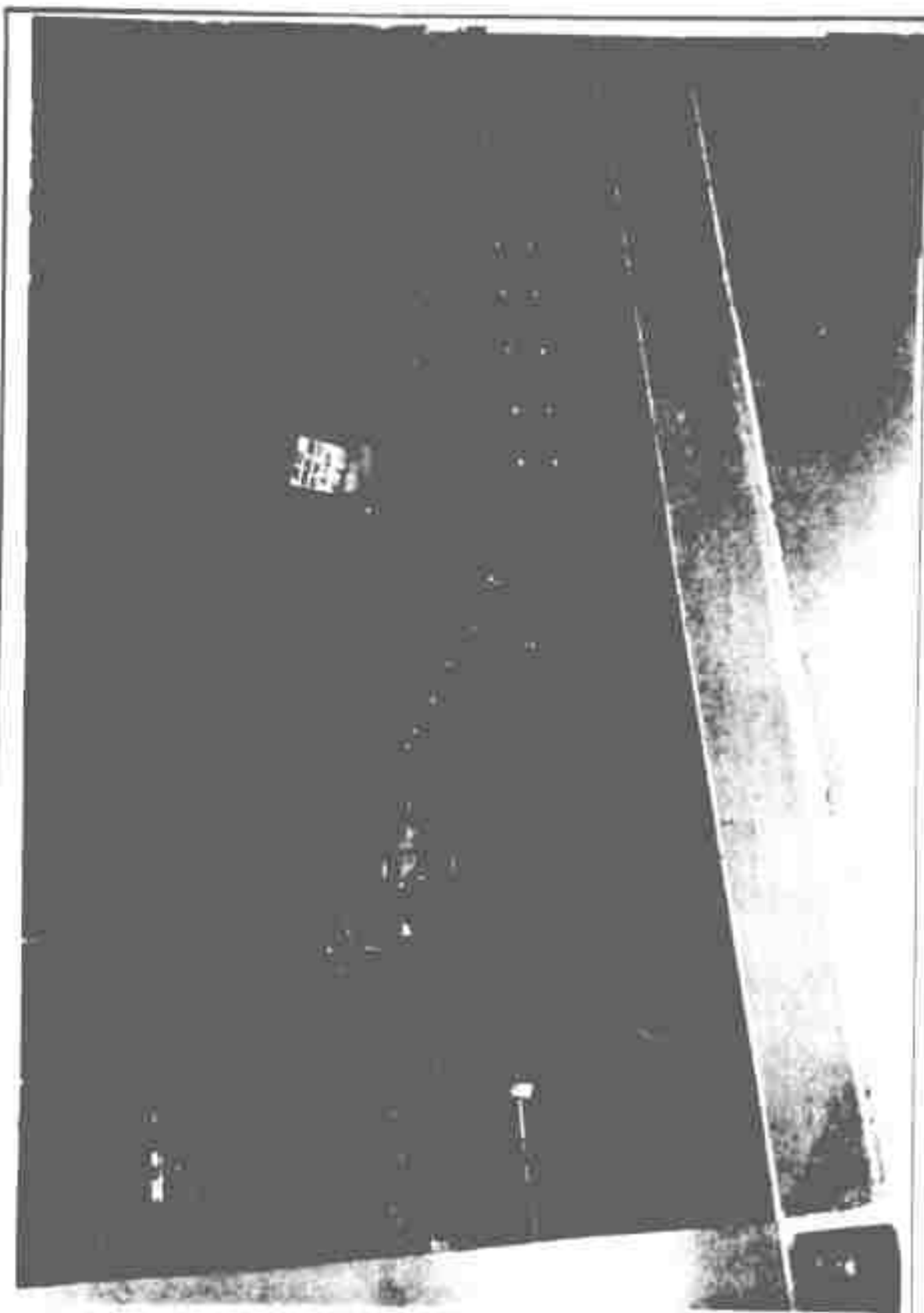


CALC	ERD	6-13-2	REVISED	DATE	SHEAR LOAD SYSTEM		EWA
CHECK					CORRUGATED SHEAR WEB TESTS ~		5652
APPD	JLO	4-26-3			CONTROL SURFACE PANELS		D2-80081
APPD					BOEING AIRCRAFT COMPANY		PAGE
							FIG 24

24059046

25-80578-1

43

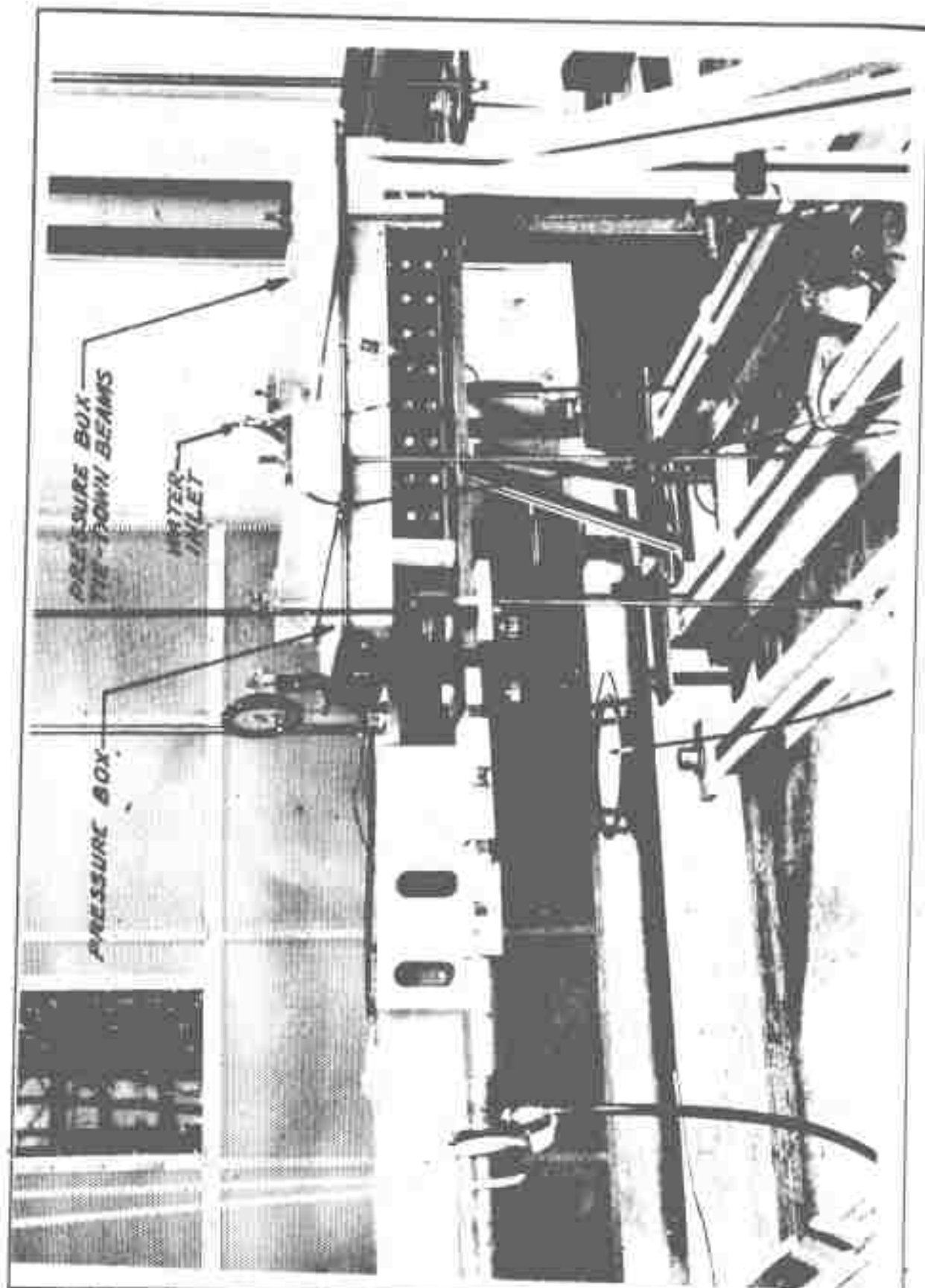


ALC	<i>ERD</i>	<i>6-13-2</i>	REVISED	DATE	SHEAR LOAD SYSTEM	EW
CHECK					CORRUGATED SHEAR WEB TESTS ~	5-652
APPD	<i>JLO</i>	<i>4-26-3</i>			CONTROL SURFACE PANELS	D2-80081
APPD					BOEING AIRCRAFT COMPANY	PAGE
						FIG. 25

24110648

WEB PANEL FAILURE 5-23-62

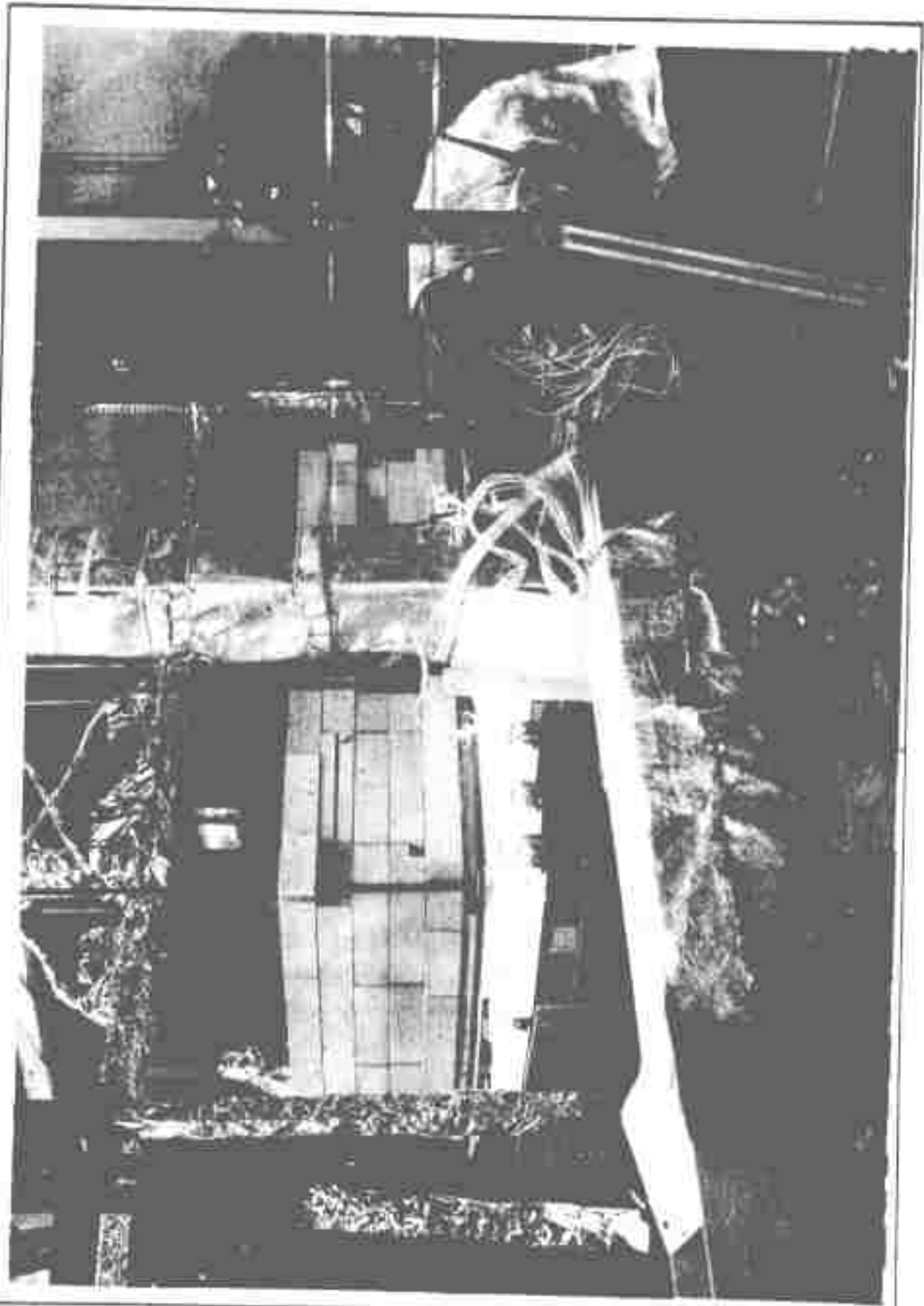
DS



DATE	ERO	6-13-62	REVISED	DATE	SHEAR & PRESSURE LOAD SYSTEMS	EWA
CHECK					CORRUGATED SHEAR WEB TESTS ~	5-652
APPD	JLO.	4-26-72			CONTROL SURFACE PANELS	D2-80081
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 26

U3 4036 3000 (WAS BAC 973D-R3)

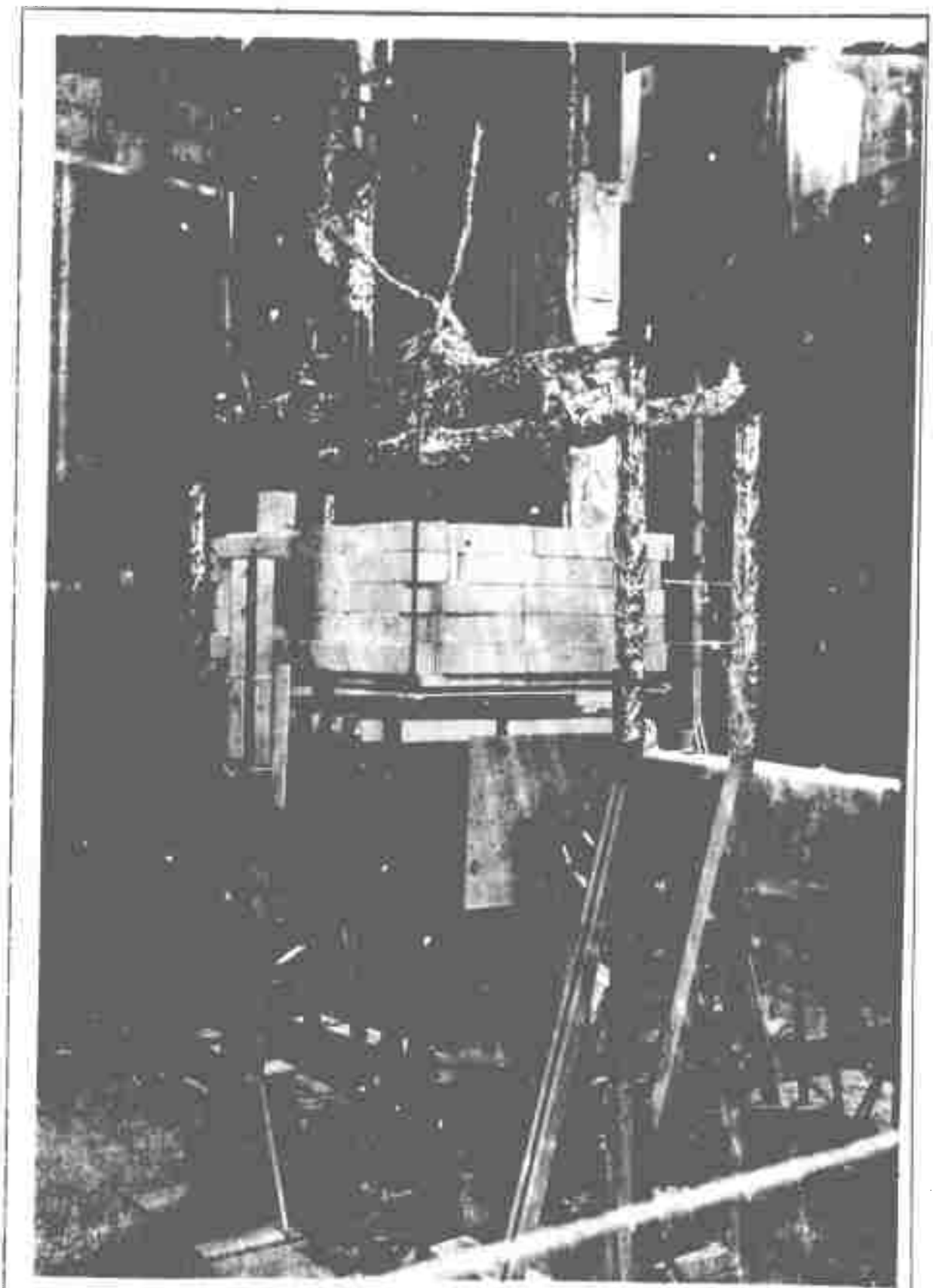
2-7000



DATE	6-27-72	REVISED	DATE	TEST SETUP ~ LT 5452-2-1	EWA
CHECK				CORRUGATED SHEAR WEB TESTS ~	5-452
APPRO	5-35			ELEVATED TEMPERATURE	DL-80081
APPRO				BOEING AIRPLANE COMPANY	PAGE
					FIG. 27

2AL-20-4

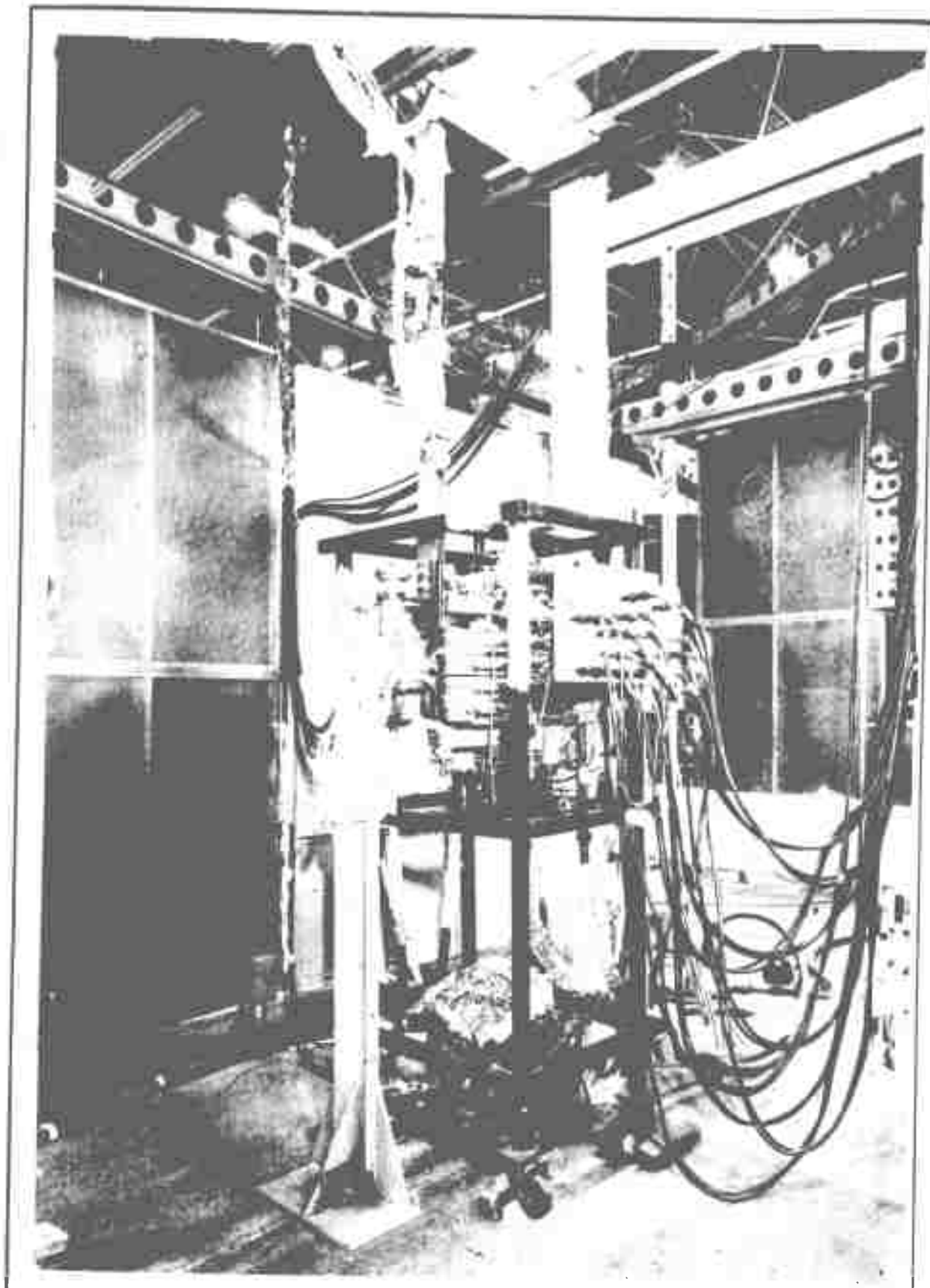
2-48 MEE TEST SET - 17



CALC	ERS	6-27-2	REVISED	DATE	TEST SETUP ~ LT 5652-2-1 CORRUGATED SHEAR WEB TESTS ~ ELEVATED TEMPERATURE	EWA 5-652
CHECK						02-80081
APPD	7-10	5-8-3				PAGE FIG. 28
APPD					BOEING AIRPLANE COMPANY	

24113332
SHEAR PANEL TEST SETUP LT 5652-3
5-27-62

47

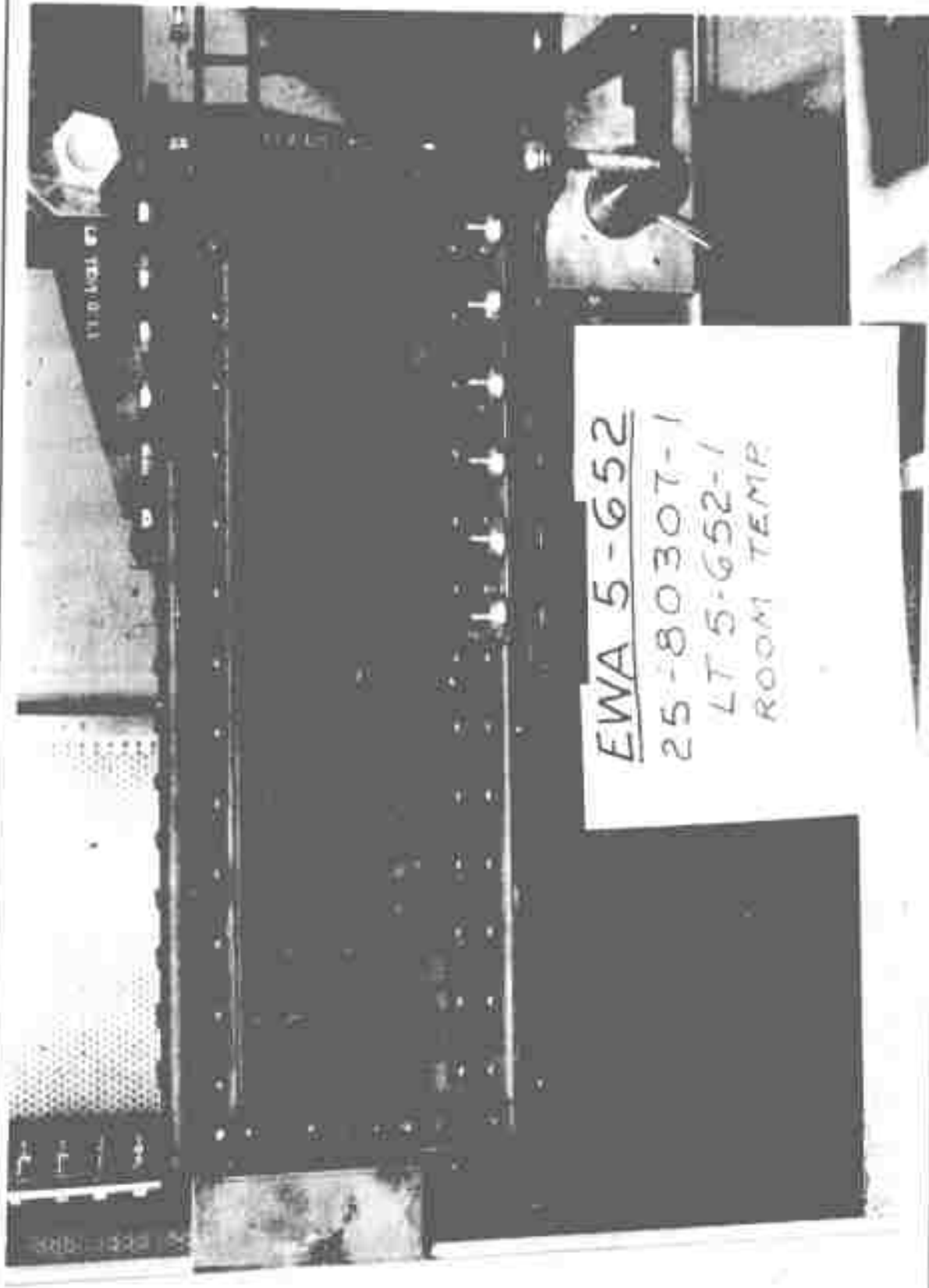


CALC	J. L. O.	6-27-62	REVISED	DATE	TEST SETUP ~ LT-5652 - 3	EWA
CHECK					CORRUGATED SHEAR PANEL TESTS	5-652
APPD	ERD	5-8-63			~ ELEVATED TEMPERATURE ~	D2-80081
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 29

24111696

LT-552 - ROOM TEMPERATURE SHEAR PANEL
 AUGATED SHEAR WEB PANEL TEST 6-1-62

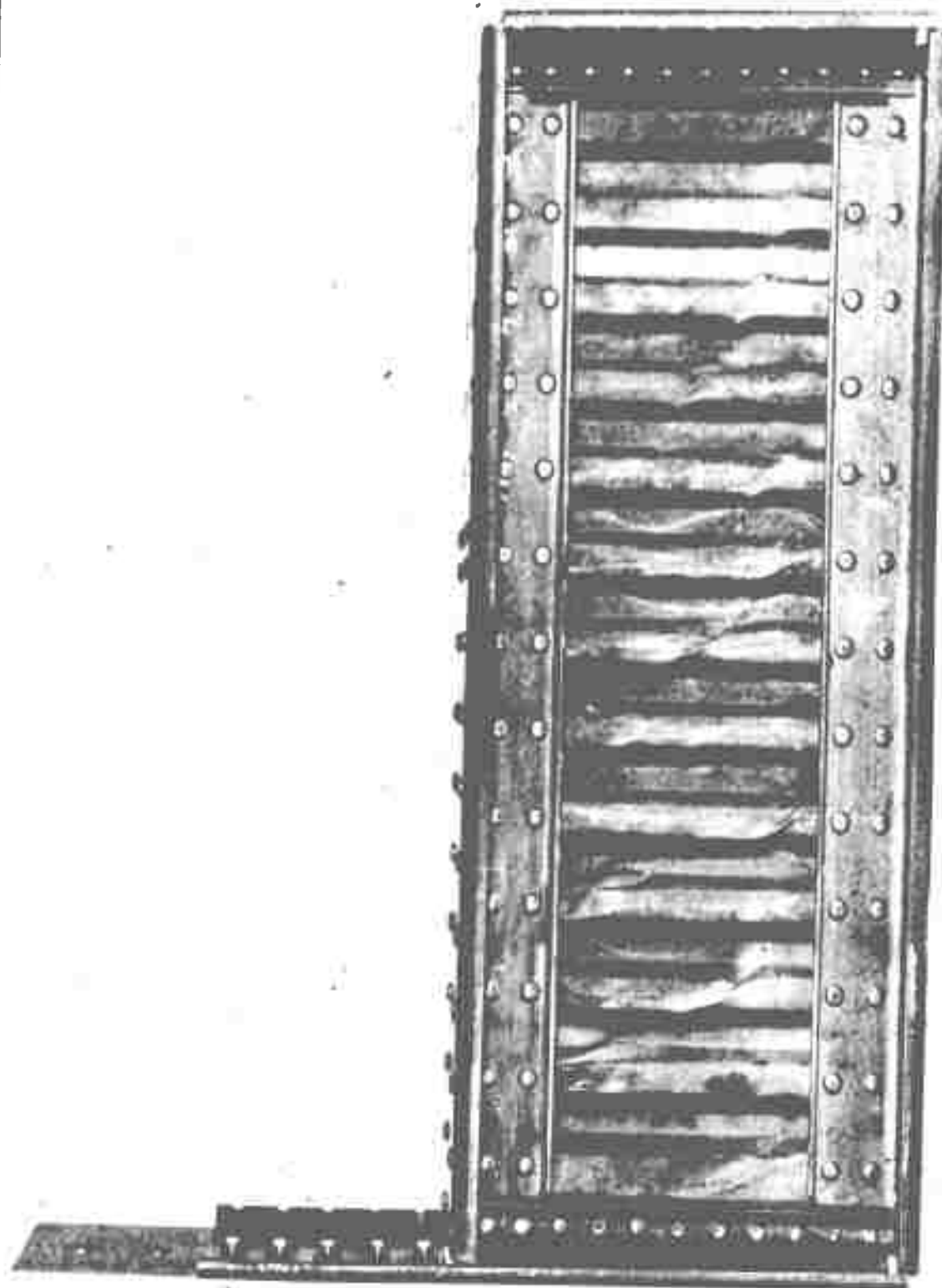
48

						
ENCL	ENC	6-15-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-1-1 CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURE ELEMENTS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						D2-80081
APPD	APPD	5-1-3				PAGE
APPD						FIG. 30

2411172

HEAR PANEL 25-80307-1
658-1-1 6-5-62

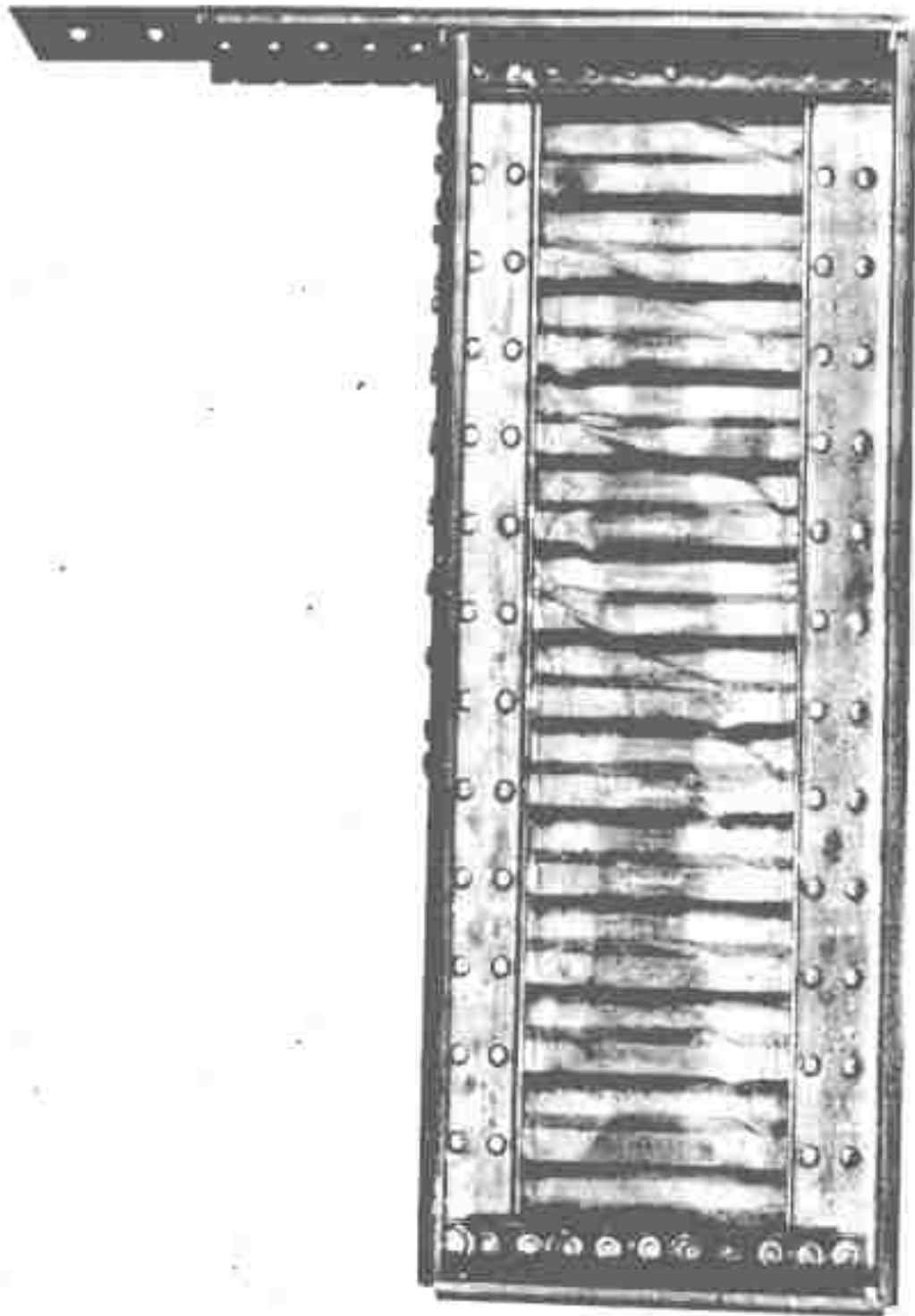
48



CALC	EDA	6-15-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-1-1 CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURE ELEMENTS BOEING AIRPLANE COMPANY	EWA
CHECK						5-652
APPD	J.L.O.	5-8-3				DZ-80081
APPD						PAGE FIG. 31

2411771

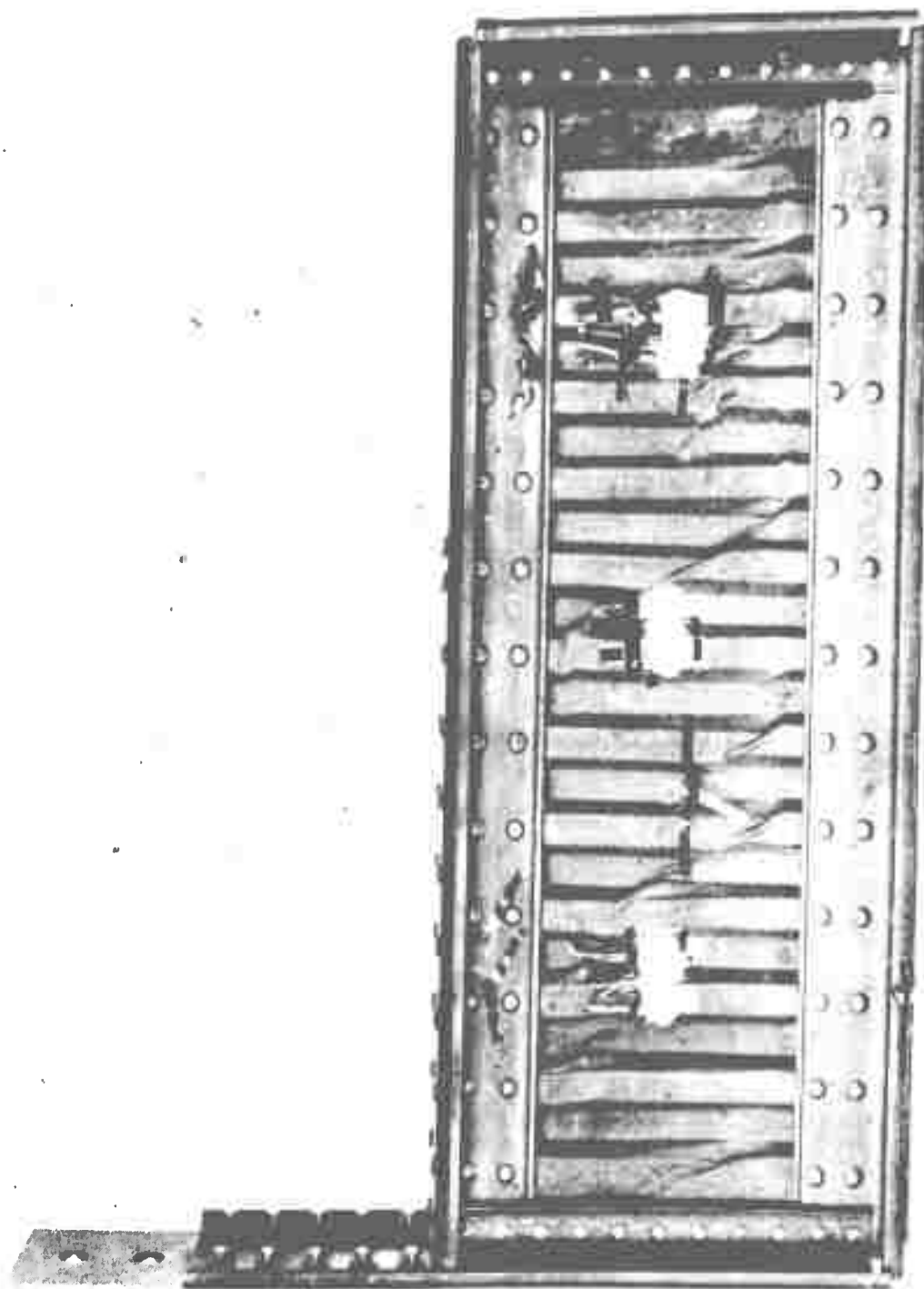
SHEAR PANEL 25-80307-1
5652-1-1 6-5-62



CALC	<i>EDA</i>	<i>6-15-2</i>	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-1-1 CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURE ELEMENTS BOEING AIRPLANE COMPANY	EWA
CHECK						5-652
APPD	<i>J.P.O.</i>	<i>5-8-3</i>				D2-80081
APPD						PAGE FIG. 32

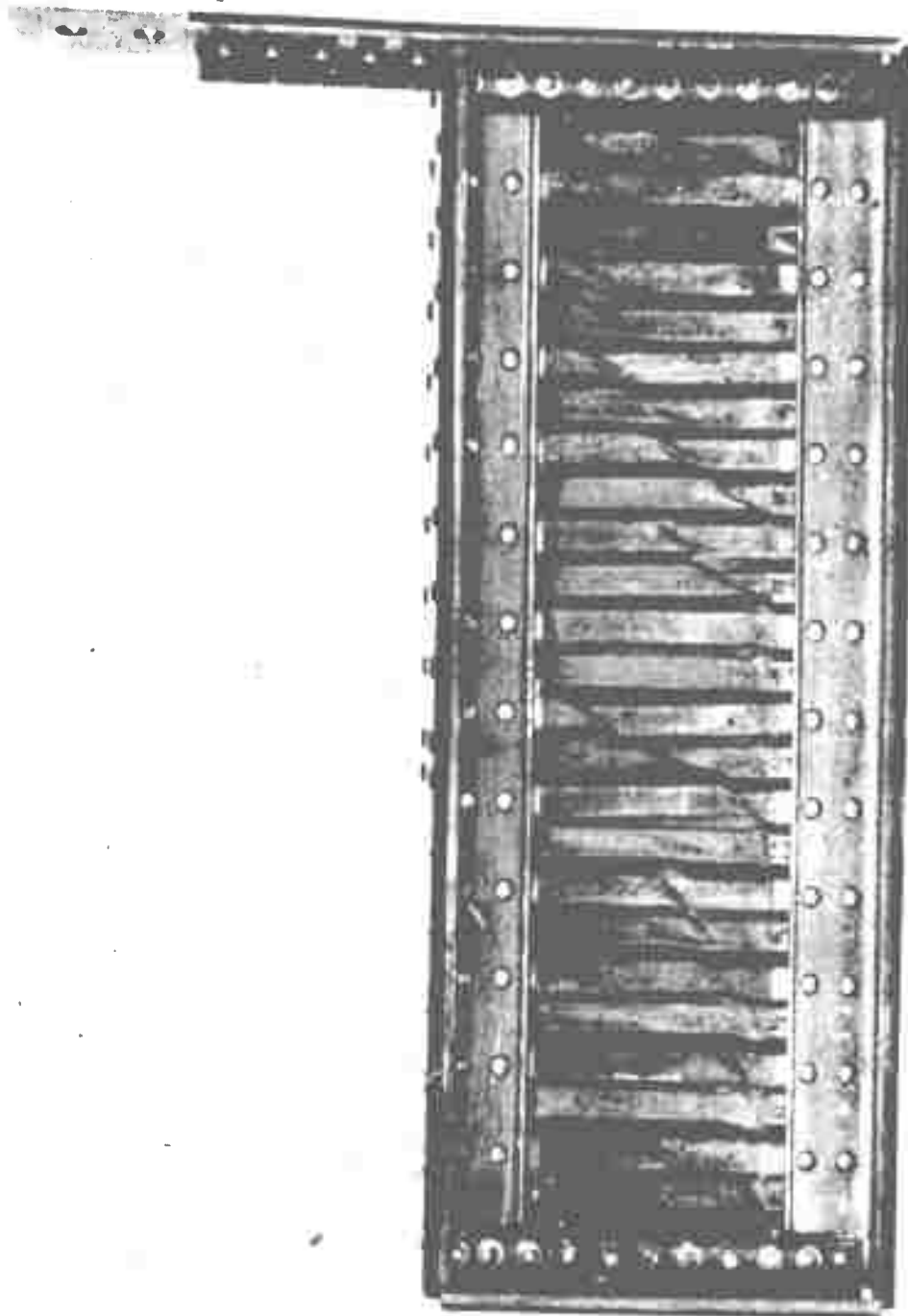
49

REAR PANEL 25-80307-1 - LT 5562-1-2 24111963

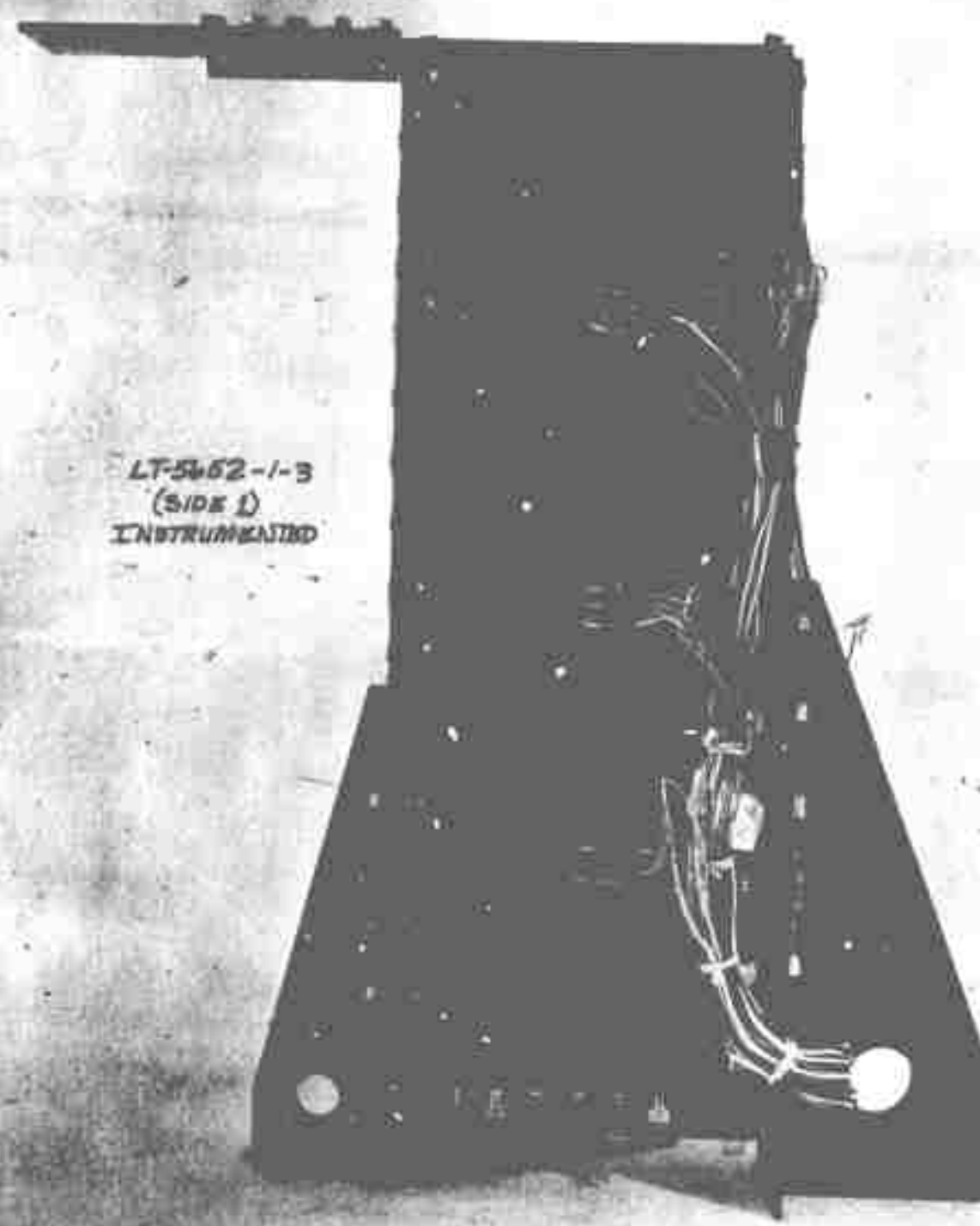


CALC	ERD	6-15-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-1-2 CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURE ELEMENTS	EWA 5-652
CHECK						
APPD	J.T.O.	5-8-3			BOEING AIRPLANE COMPANY	D2-80081
APPD						PAGE FIL. 33

WAS PANEL 25-80307-1 - LT 5652-1-2 2411964



CALC	<i>ERA</i>	6-15-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-1-2 CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURE ELEMENTS BOEING AIRPLANE COMPANY	EWA
CHECK						5-652
APPD	<i>J.L.O.</i>	5-8-3				Q2-80081
APPD						PAGE
						FIG.34



LT-5652-1-3
(SIDE 1)
INSTRUMENTED

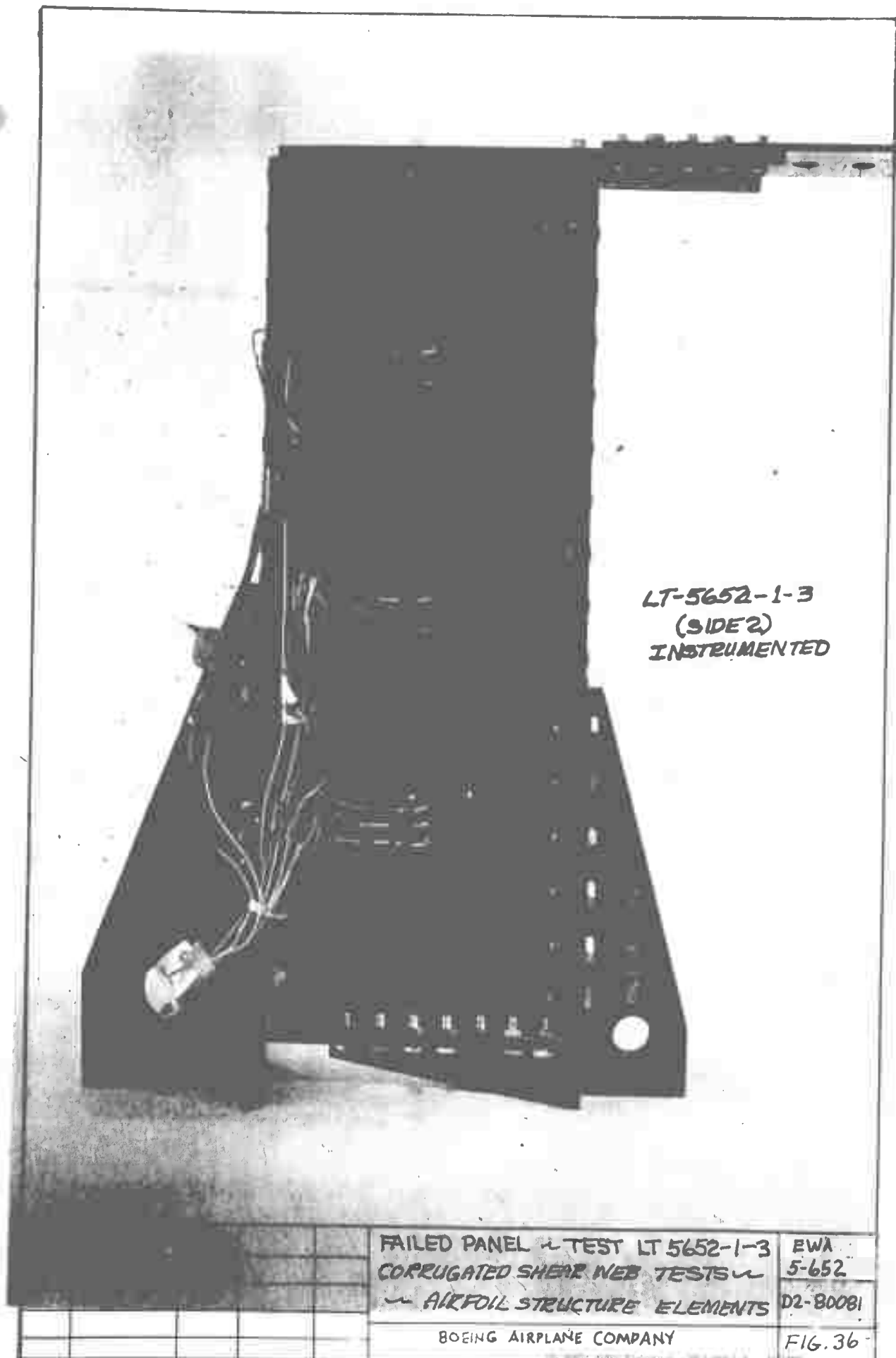
FAILED PANEL ~ TEST LT 5652-1-3
CORRUGATED SHEAR WEB TESTS ~
AIRFOIL STRUCTURE ELEMENTS

EWA
5-652
D2-80081

BOEING AIRPLANE COMPANY

DS- SHEAR PANEL 25-80307-1 LT 5-652-1-3
SIDE NO. 1 7-3-60

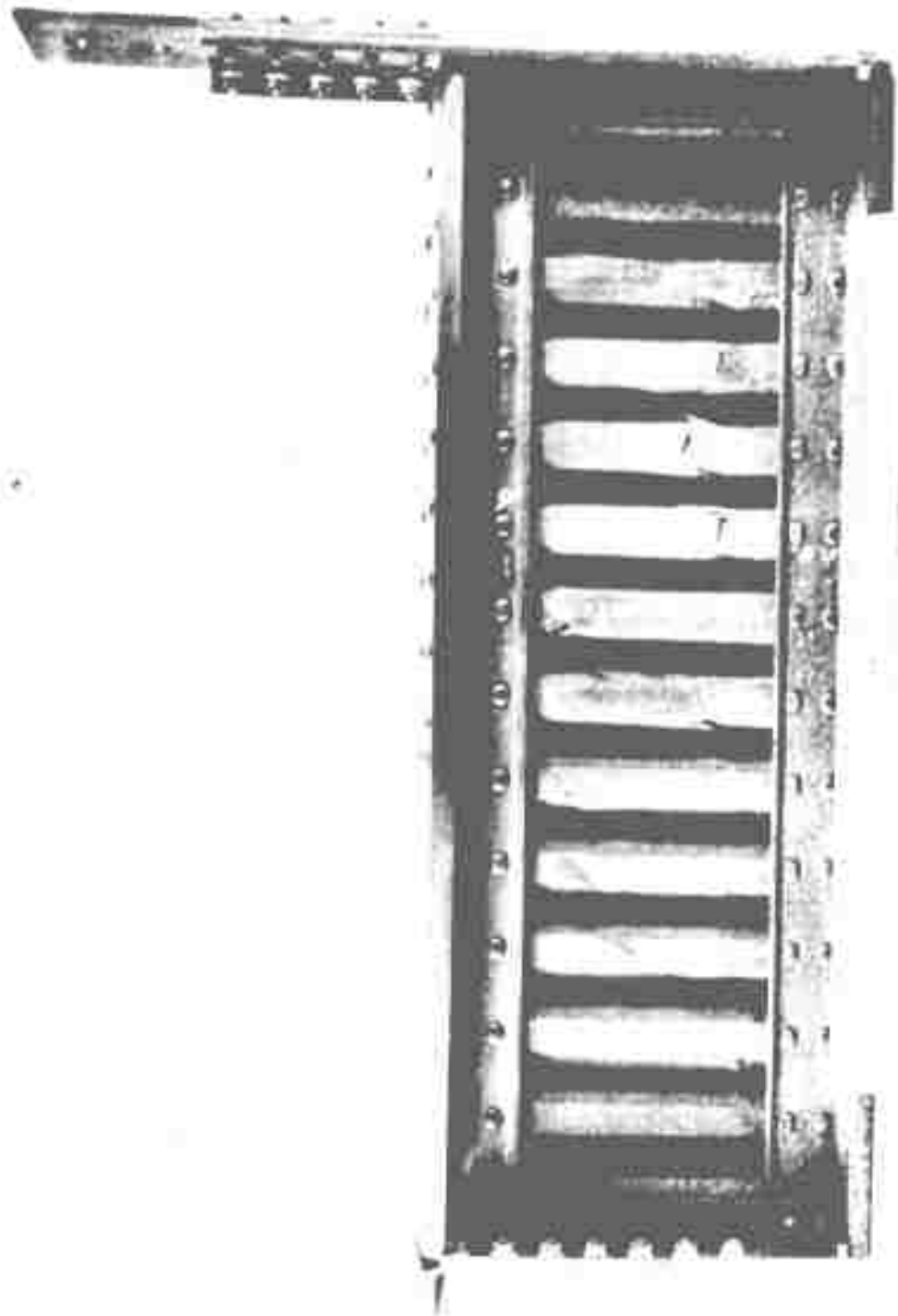
FIG. 35
PA113549



LT-5652-1-3
(SIDE 2)
INSTRUMENTED

CORRUGATED SHEAR WEB PANEL 25-8-30-1-1 2A13-5
 -P HEAT TEST 1-2-02

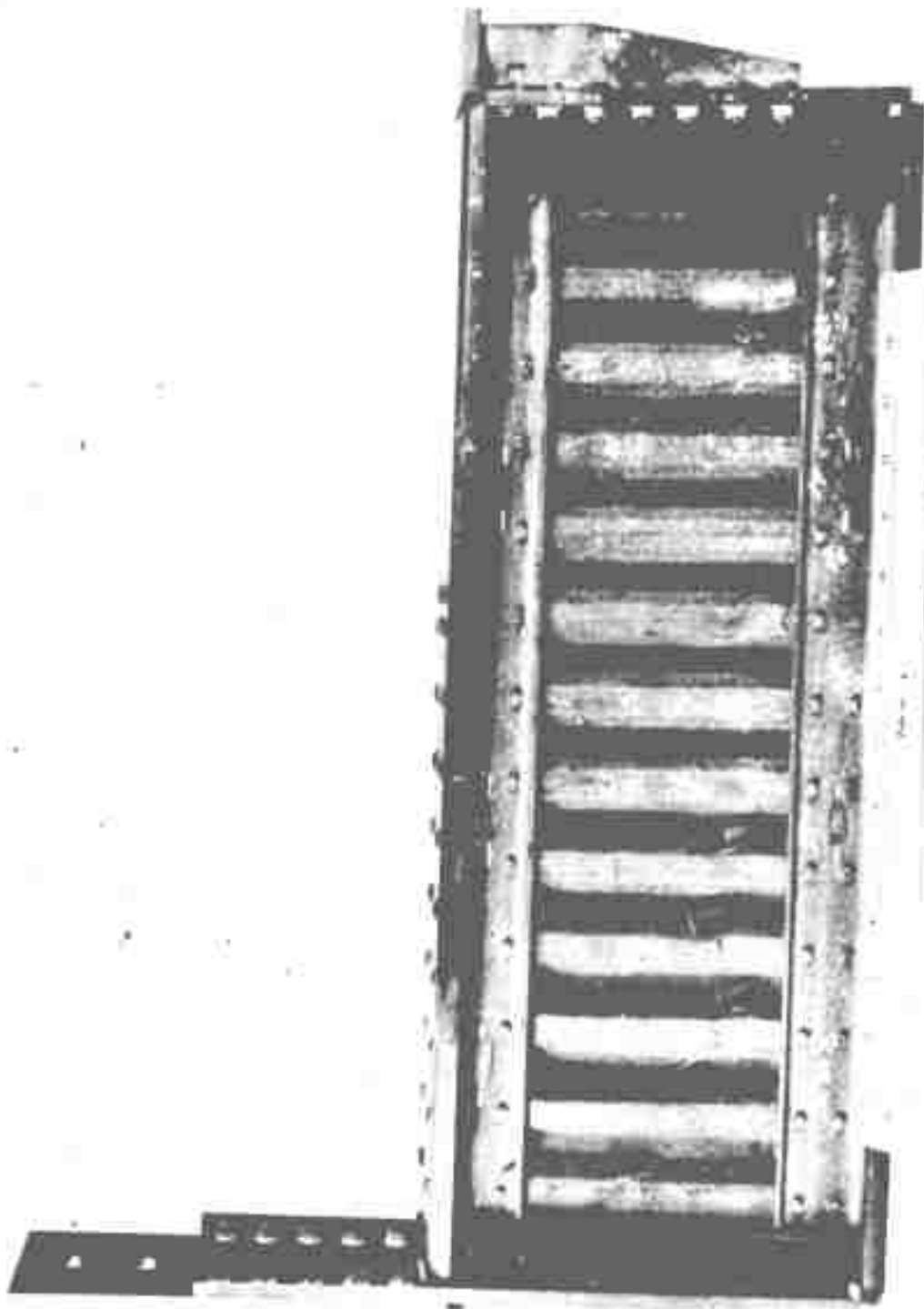
54



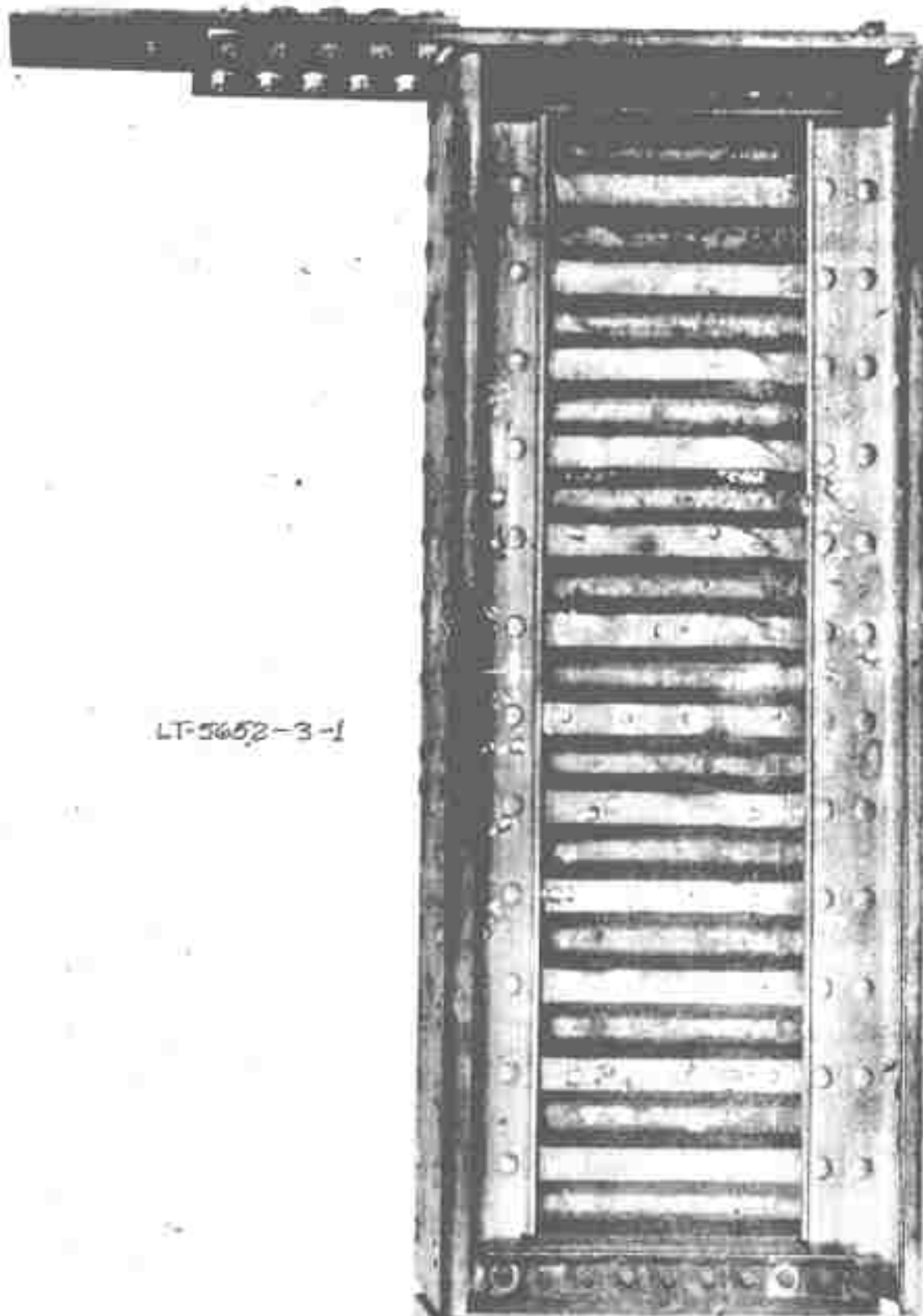
CALC	<i>6192</i>	REVISED	DATE	FAILED PANEL - TEST LT-5552-2-1 CORRUGATED SHEAR WEB TESTS AIRFOIL STRUCTURE ELEMENTS BOEING AIRPLANE COMPANY	EWA
CHECK					5-652
APPD	<i>ER.D. 4-26-3</i>				DE-5000
APPD					PAGE

CORRUGATED SHEAR WEB PANEL 25-80307-1 2ALL2685
 HEAT TEST 6-19-62

55



CALC	J.L.O.	6-19-62	REVISED	DATE	FAILED PANEL - TEST LT-56522-1 CORRUGATED SHEAR WEB TEST ~ AIRFOIL STRUCTURAL ELEMENTS BOEING AIRPLANE COMPANY	EWA
CHECK						5-652
APPD	ED.	5-8-3				D2-80081
APPD						PAGE
						FIG. 38

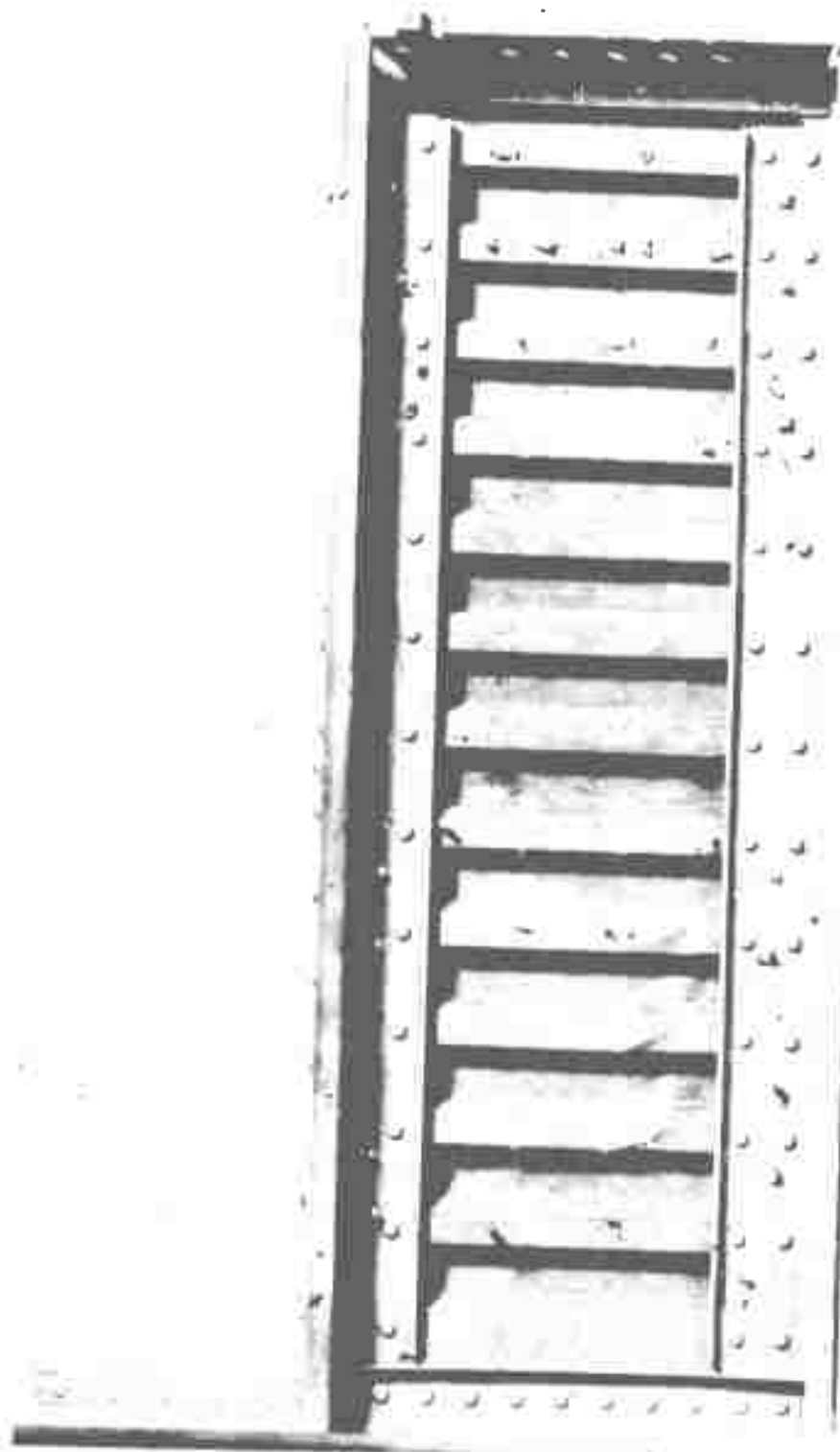


LT-5652-3-1

DATE	J.P.O. 6222				FAILED PANEL TEST LT-5652-3-1	EWA
CHECK					CORRUGATED SHEAR WEB TESTS	5-652
APPS	EEG				AIRFOIL STRUCTURAL ELEMENTS	02-80081
						FIG. 39

56

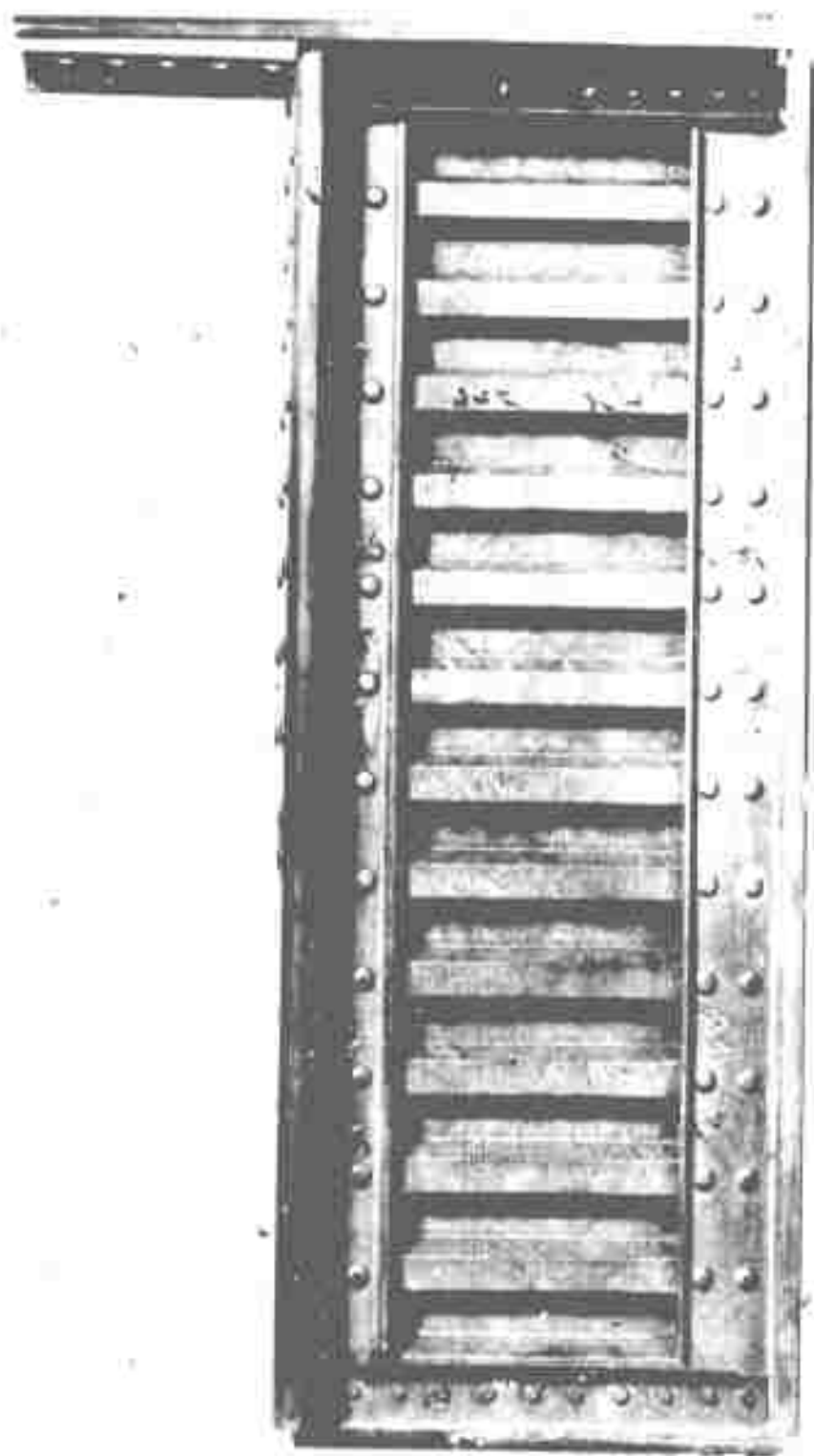
FIGURE 25-80307-1 - LT 5652-3-2 24113330



CALC	J.E.S.	6-21-2	REVISED	DATE	FAILED FAILURE TEST LT-5652-3-2	EWA
CHECK					CORRUGATED SHEAR WEB TESTS	5-652
APPD	J.E.S.	5-8-2			AIRFOIL STRUCTURAL ELEMENTS	D2-80081
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 41

58

BY 6
 AIR PANEL 25-80307-1 - LT 5652-3-2 2A113331



CALL	J.L.O.	6-27-62	REVISION	DATE	FAILED PANEL - TEST LT-5652-3-2 CORRUGATED SHEAR WEB TESTS ~ AIRFOIL STRUCTURAL ELEMENTS BOEING AIRPLANE COMPANY	EWA 5-652 D2-80081 PAGE FIG. 42
CHRG						
APPR	ERD					
APPD						

59

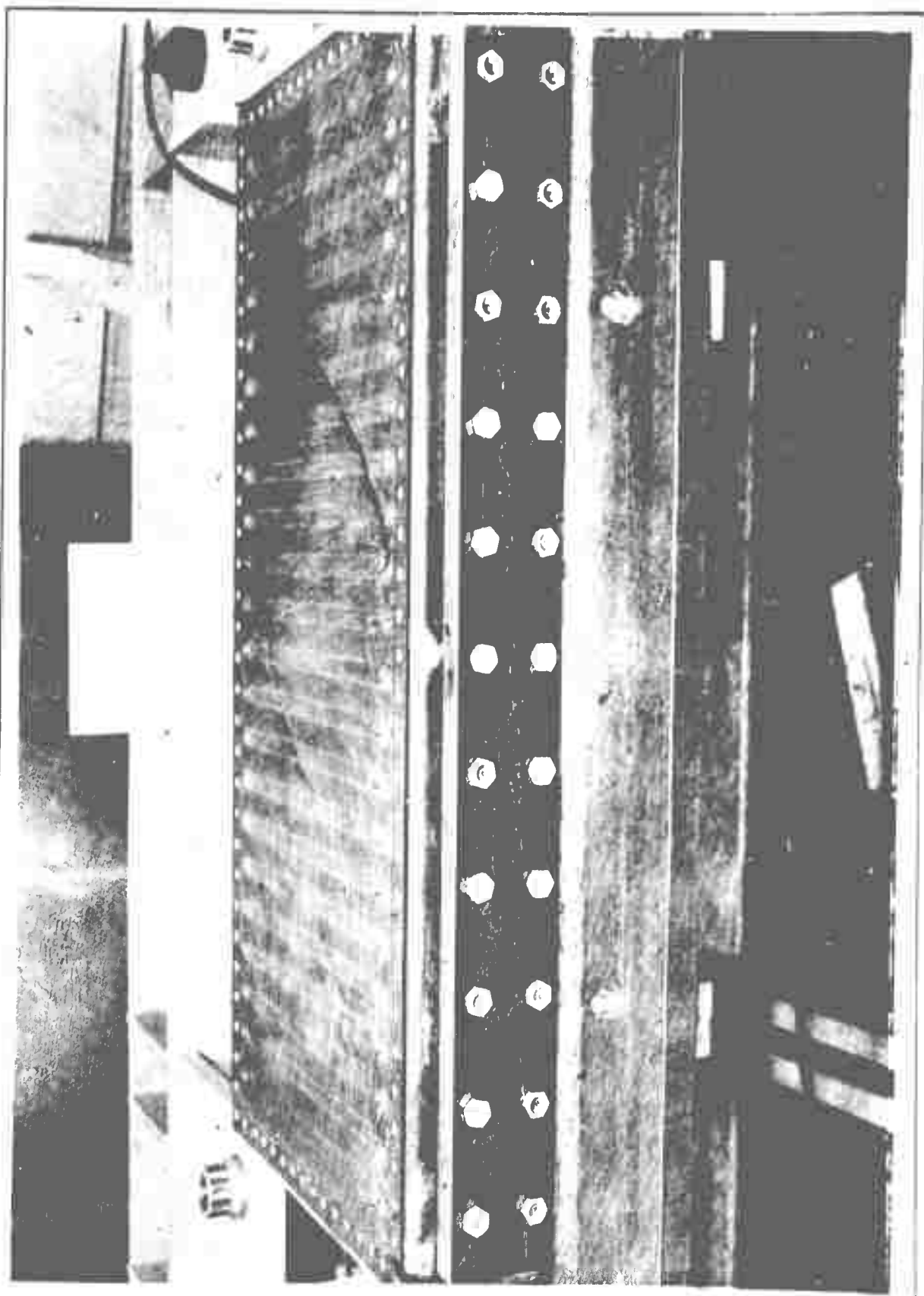
U3 4036 3000 (WAS BAC 973D-R3)

2-7000

24109217

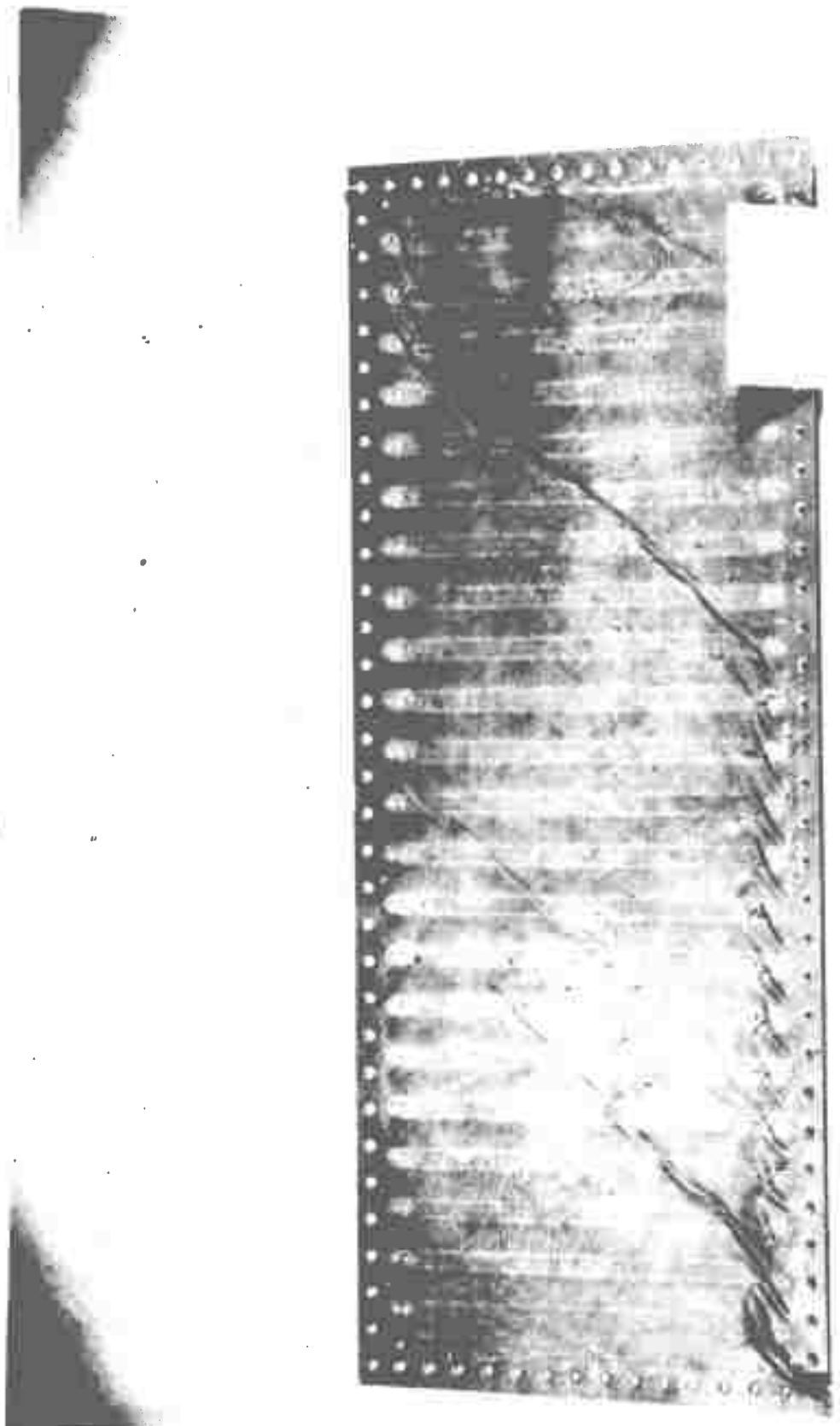
BRUGATED SHEAR WEB FAILURE

60



CALC	<i>ERB</i>	6-13-2	REVISED	DATE	TYPICAL FAILED PANEL IN SHEAR-FRAME CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BELLING AIRPLANE COMPANY	EWA 5-652
CHECK						
APPD	<i>J.F.O</i>	5-8-3				D2-80081
APPD						PAGE FIG. 43

IS-1 - CORRUGATED SHEAR WEB FAILED PANEL
OVER-ALL FRONT 2A109327
5-3-62



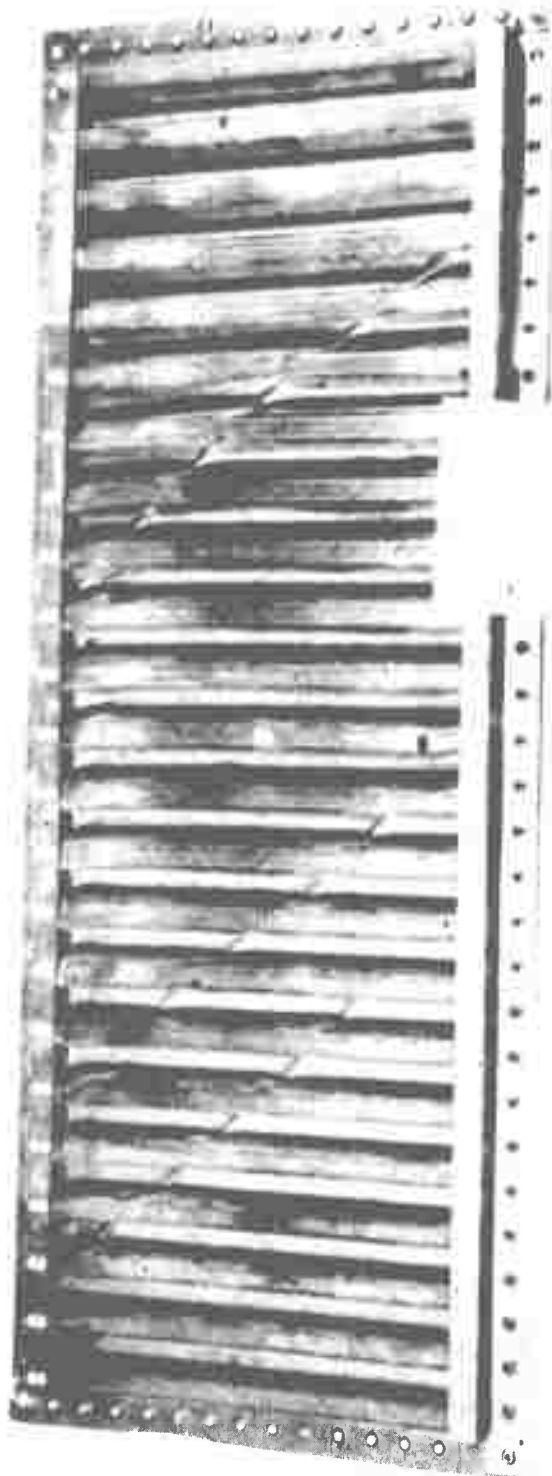
CALC	ERA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-1 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY SEATTLE 24 - WASHINGTON	EWA 5-652
CHECK						
APPD	J.L.O.	5-8-3				DZ-80081
APPD						PAGE FIG. 44

DS-1 - CORRUGATED SHEAR WEB FAILED PANEL
OVER-ALL PAPER VIEW 2A109128
5-3-62

62

CALC	66b	6-18-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-1 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY SEATTLE 24 WASHINGTON	EWA 5-652
CHICK						D2-80081
APPD	58-3					PAGE FIG. 45
APPD						

BAC 973 D-R3

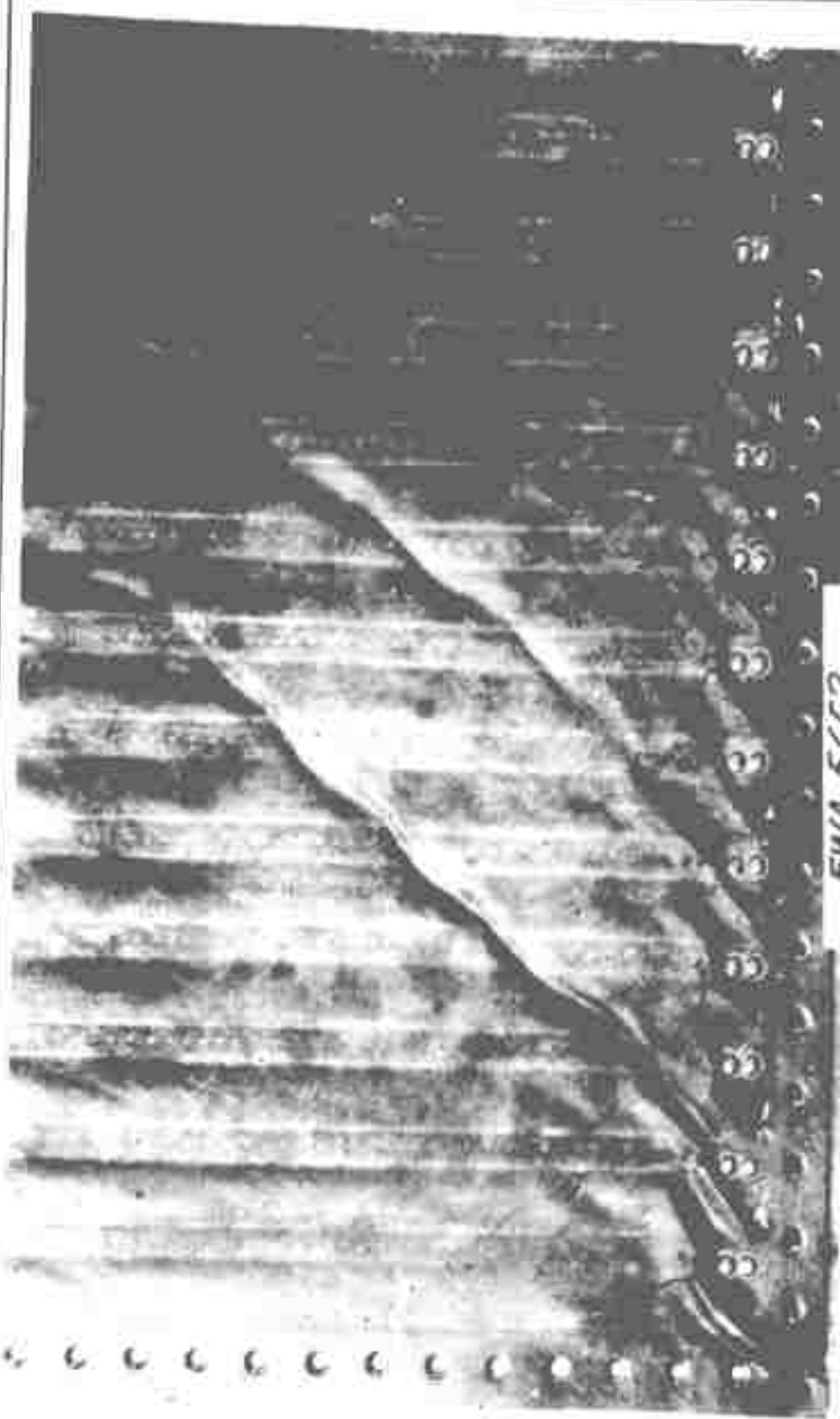


DS-I - CORRUGATED SHEAR WEB FAILED PANEL
PARTIAL FRONT VIEW
5-3-62
2A09330

63

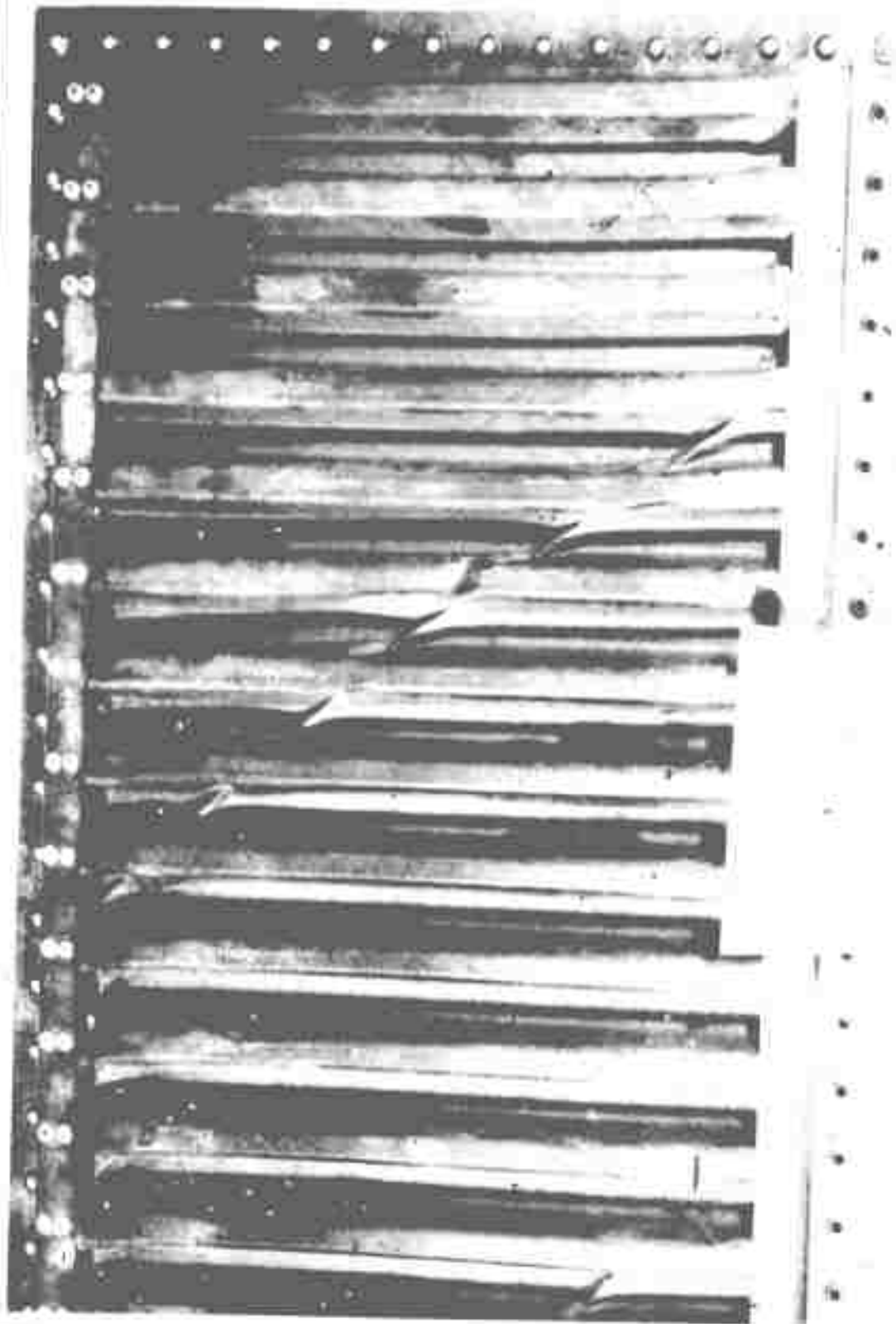
CALC	<i>ERU</i>	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-1 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS	EWA 5-652
CHECK						02-80081
APPD	<i>J. H. D.</i>					
APPD						
					BOEING AIRPLANE COMPANY SEATTLE 24, WASHINGTON	PAGE F16.46

BAC 973 D-R3



EWA 5652
 CORRUGATED SHEAR
 WEB PANEL
 25-80578 (AFTER
 TEST)
 MAT'L LAB 4-30-62

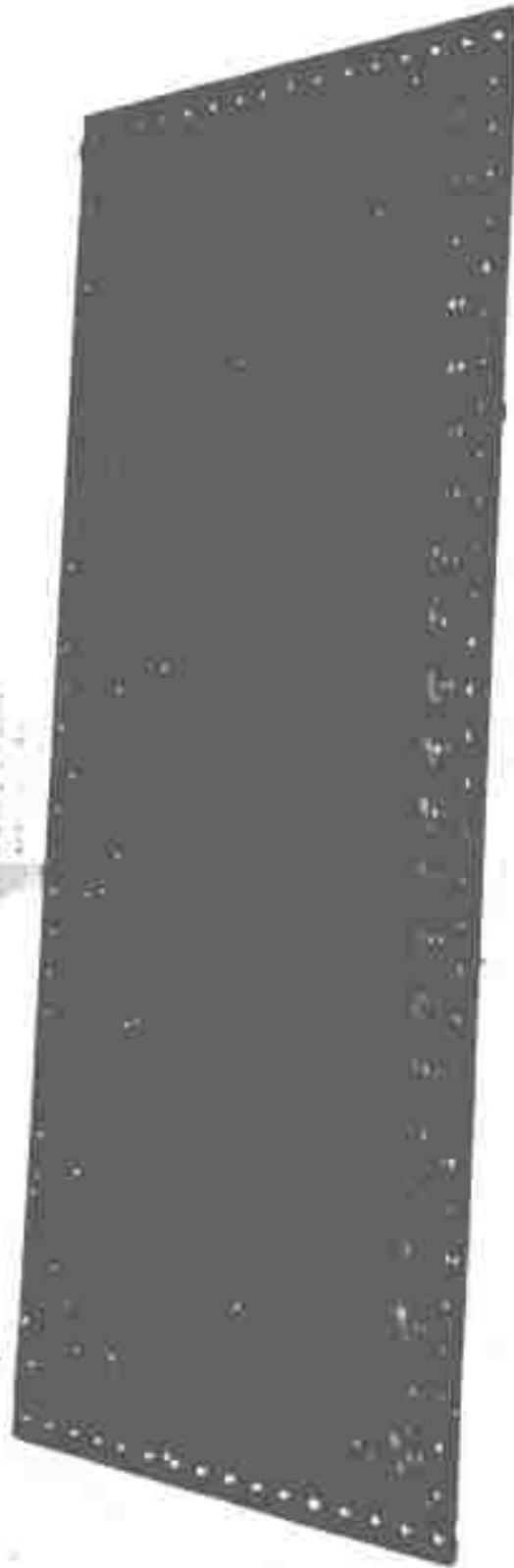
DS-1 - CORRUGATED SHEAR WEB FAILED PANEL
PARTIAL BACK VIEW 21109329
5-3-62



64	CALC	<i>ERR</i>	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-1 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY SEATTLE 24, WASHINGTON	EWA 5-652
	CHECK						02-8000
	APPD	<i>G. L. O.</i>					
	APPD						PAGE FIG 47

DS-1 - SHEAR WEB FAILURES 25-80578-1 LOT 6 2AUG9863
TOP SIDE 5-10-62

65



DATE	8-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-2	EWA
CHECK				CORRUGATED SHEAR WEB TESTS ~	5-652
APPD				CONTROL SURFACE PANELS	02-80081
APPD				BOEING AIRPLANE COMPANY	PAGE
					FIG. 49

SHEAR WEB FAILURE 25-80578-1 LOT 6 2A199862
 Unmarked SIZE. 5-10-62

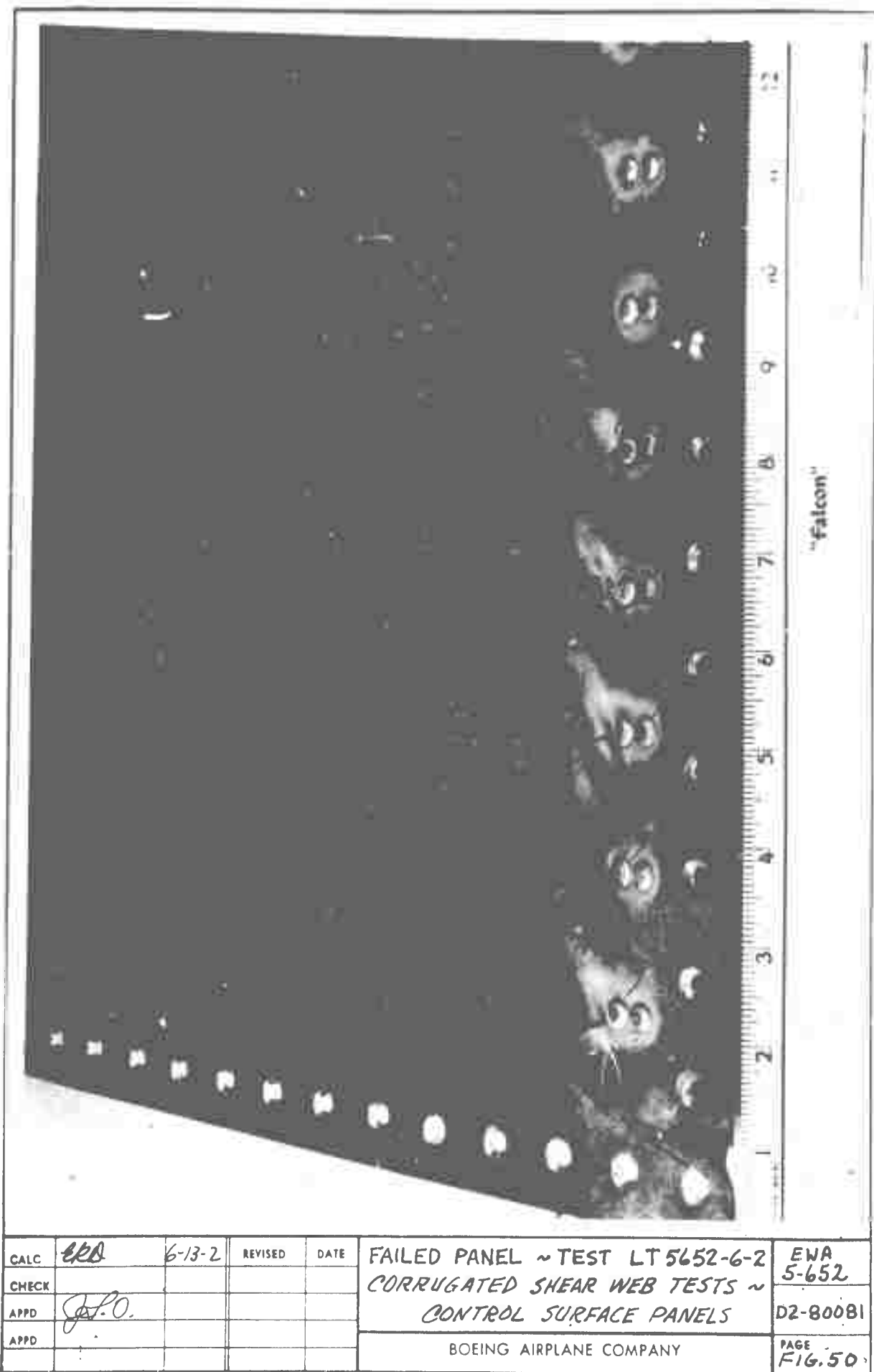
66



CALC	<i>ERA</i>	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-2 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	FWA 5-652
CHECK						DZ-B0081
APPD	<i>ASO</i>					PAGE FIG. 49
APPD						

DG-1 - SHEAR WEB FAILURE 25-80578-1 LOT 6 2A109860
 TOP SIDE 5-10-62

67



18- GEAR WEB FAILURE 25-80578-1 LOT 6 2A109861
TOP SIDE 5-10-62

68

DATE	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-2	EWA
CHECK				CORRUGATED SHEAR WEB TESTS ~	5-652
APPRO				CONTROL SURFACE PANELS	02-80081
APPRO				BOEING AIRPLANE COMPANY	PAGE
					F16 51

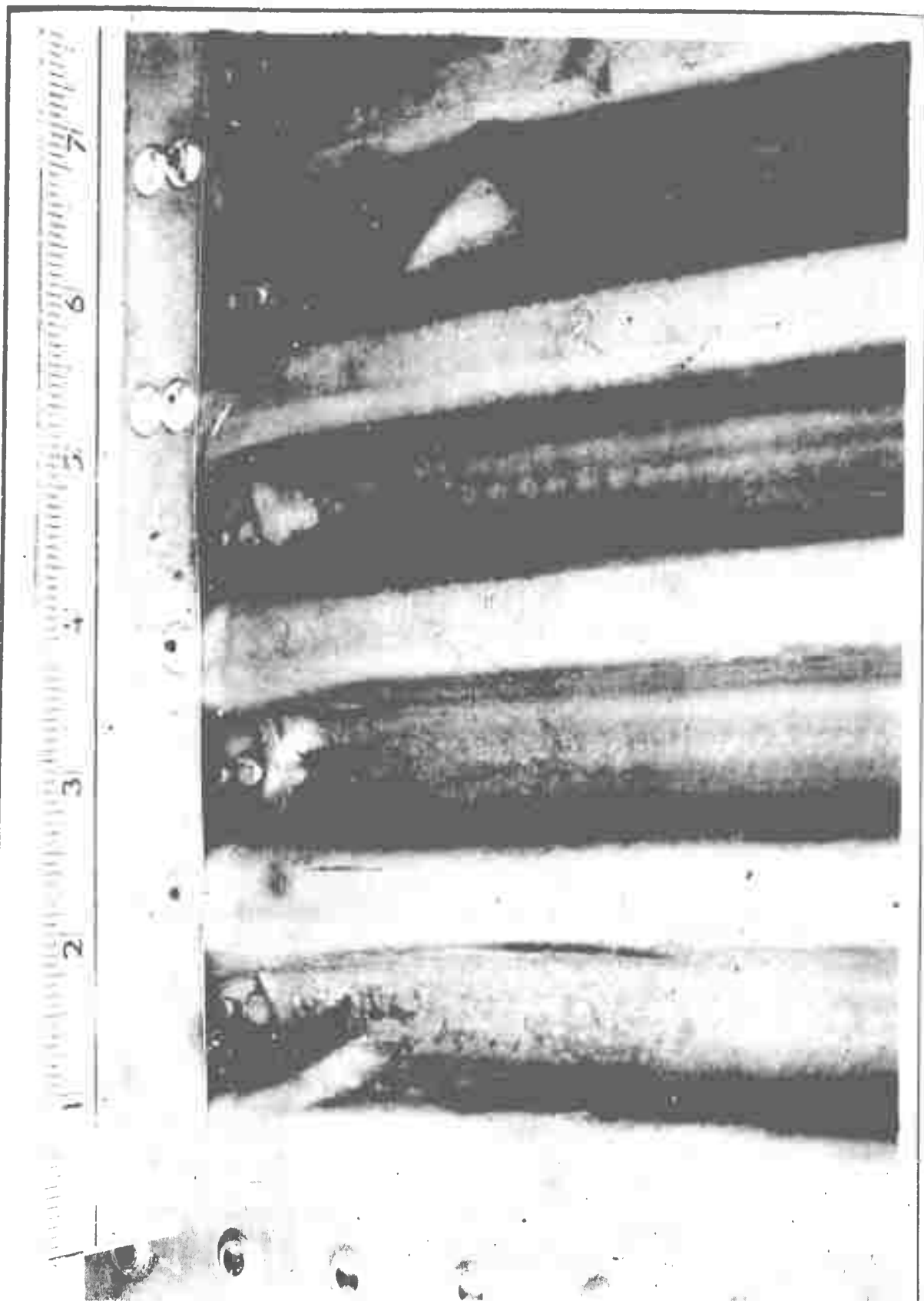
U3 4036 3000 (WAS BAC 973D-R3)

2.7000



DE-I - SHEAR WEB FAILURE 25-40570-1 LOT 6 2AL09859
5-10-68




69



CALC	ERA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-2	EWA
CHECK					CORRUGATED SHEAR WEB TESTS ~	5-652
APPD	ALO				CONTROL SURFACE PANELS	D2-80091
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 52

ANAL. PICTURE 05-00573-0 4-21-69 00104

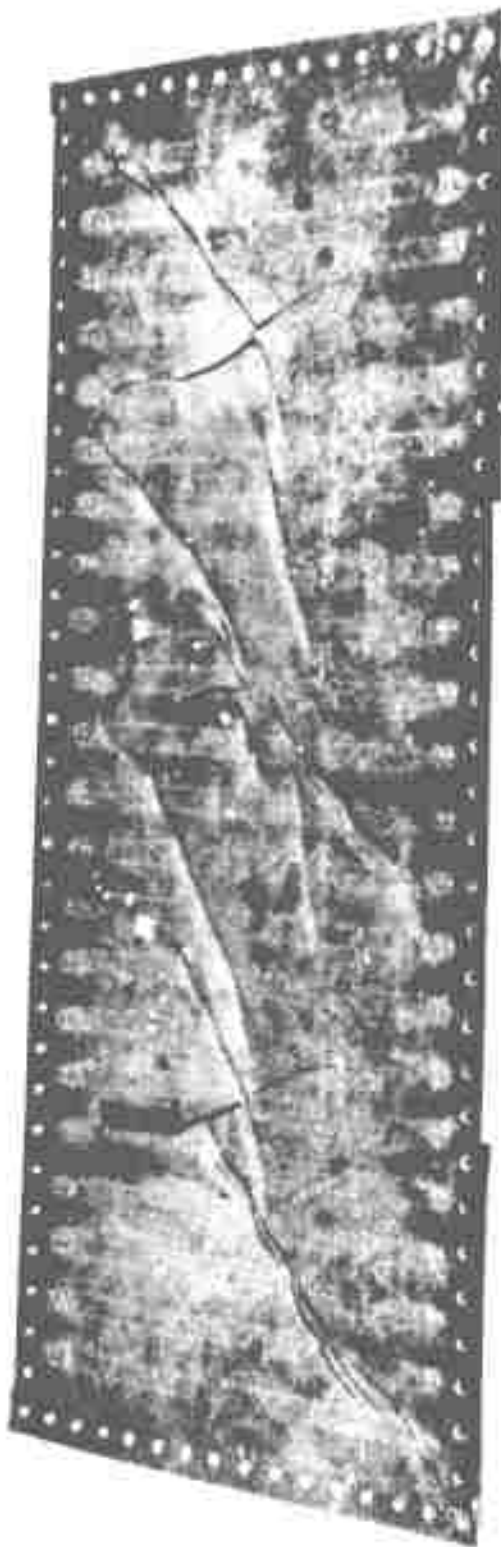
20

						
CALL	CRB	6-13-2	REVIEW	DATE	FAILED PANEL - TEST LT 5452-6-2 CORRUPTED SHEAR WEB TESTS - SURFACE PANELS AIRCRAFT COMPANY	EWA 5-654 GE 80081 11-2-63
CHECK						
AND	P.O.					
AND						

24110661

TEST PANEL 25-80978-6 - TOP VIEW

71



CALC	ERA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-3	EWA
CHECK					CORRUGATED SHEAR WEB TESTS ~	5-652
APPD	A.O.				CONTROL SURFACE PANELS	02-87081
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 54

U3 4036 3000 (WAS BAC 973D-R3)

2-7000

2411065A

TEST PANEL 25-B057B-6 - BOTTOM

5 - 62

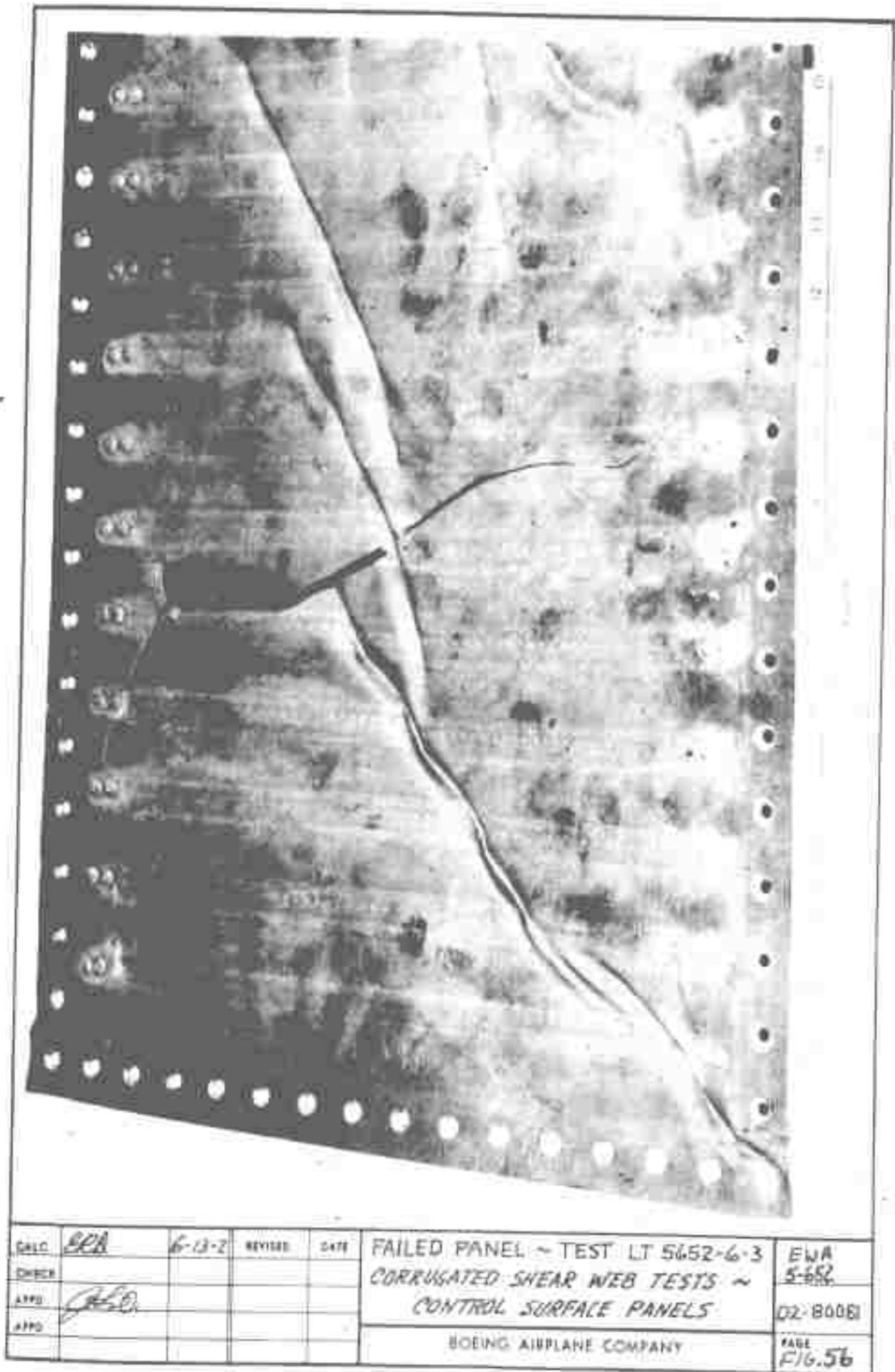
72



CALC	ERD	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-3 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						02-80081
APPD	SLO.					PAGE FIG. 55
APPD						

DS-1 TEST PANEL 25-80570-6 - TOP - CLOSE-UP 24110663
5-21-62

23



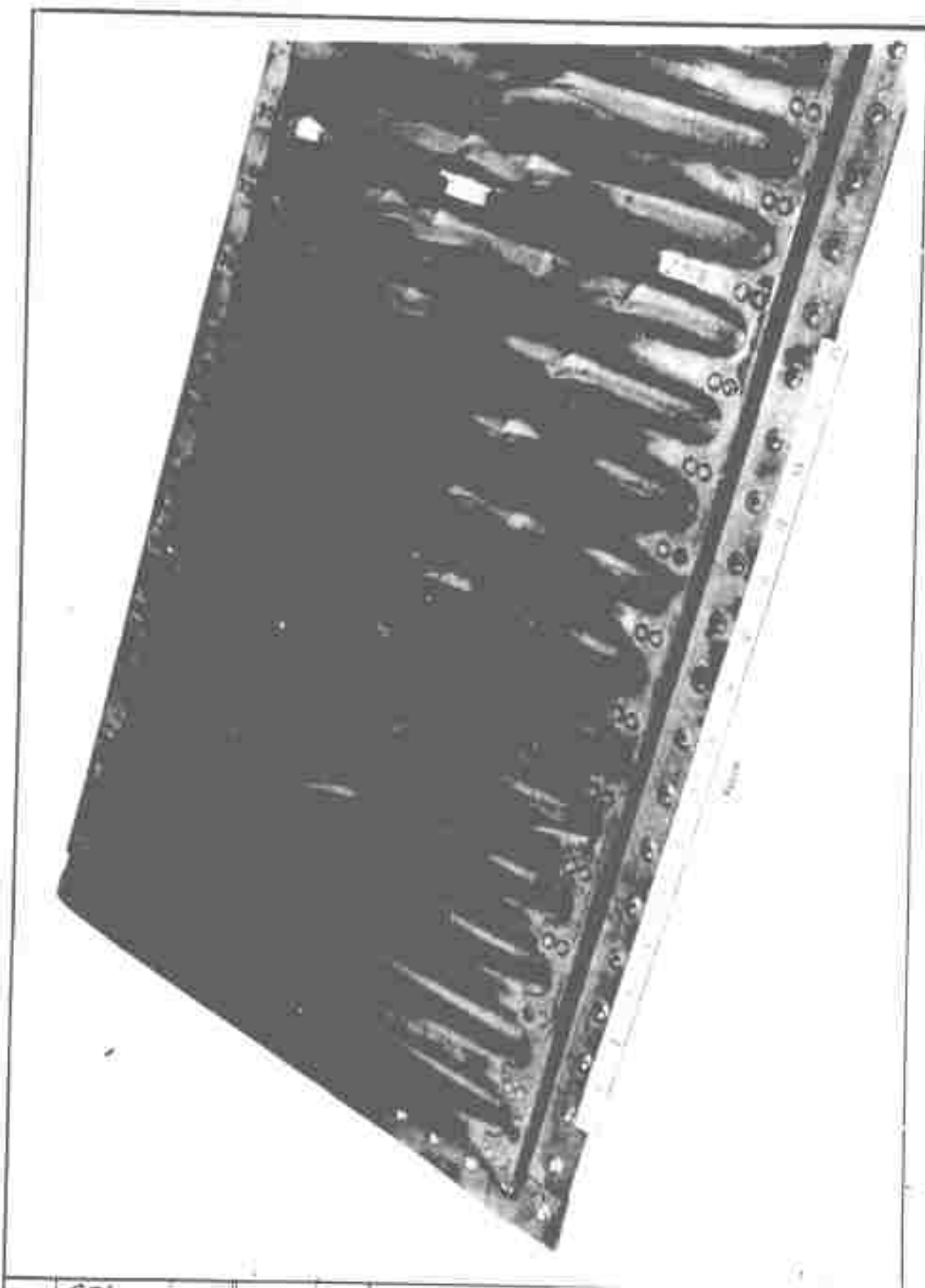
U3 4036 3000 (WAS BAC 973D-R3)

2-7000

24110662

18-1 TEST PANEL 25-80578-6 - BOTTOM
CLOSE-UP
5-21-62

74



CALC	<i>SEA</i>	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-3 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						02-80081
APPD	<i>G.H.O.</i>					PAGE FIG. 57
APPRO						

U3 403B 3000 (WAS BAC 973D-R3)

2-7000

24110552

SHEAR WEB PANEL 25-80578-6 LOT 1

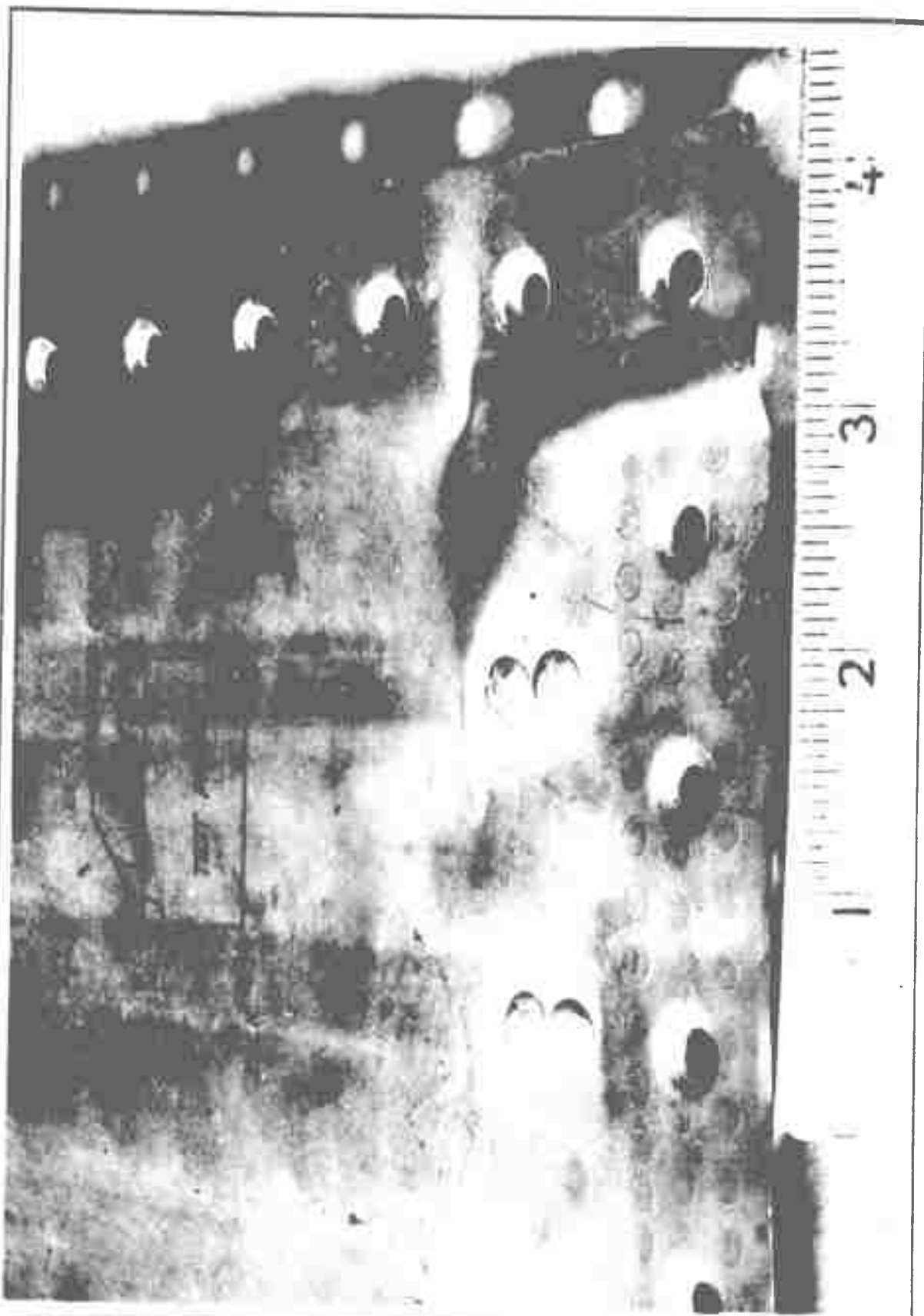
62

75



DATE	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-3 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK					D2-80081
APPD	<i>[Signature]</i>				PAGE FIG. 58
APPD					

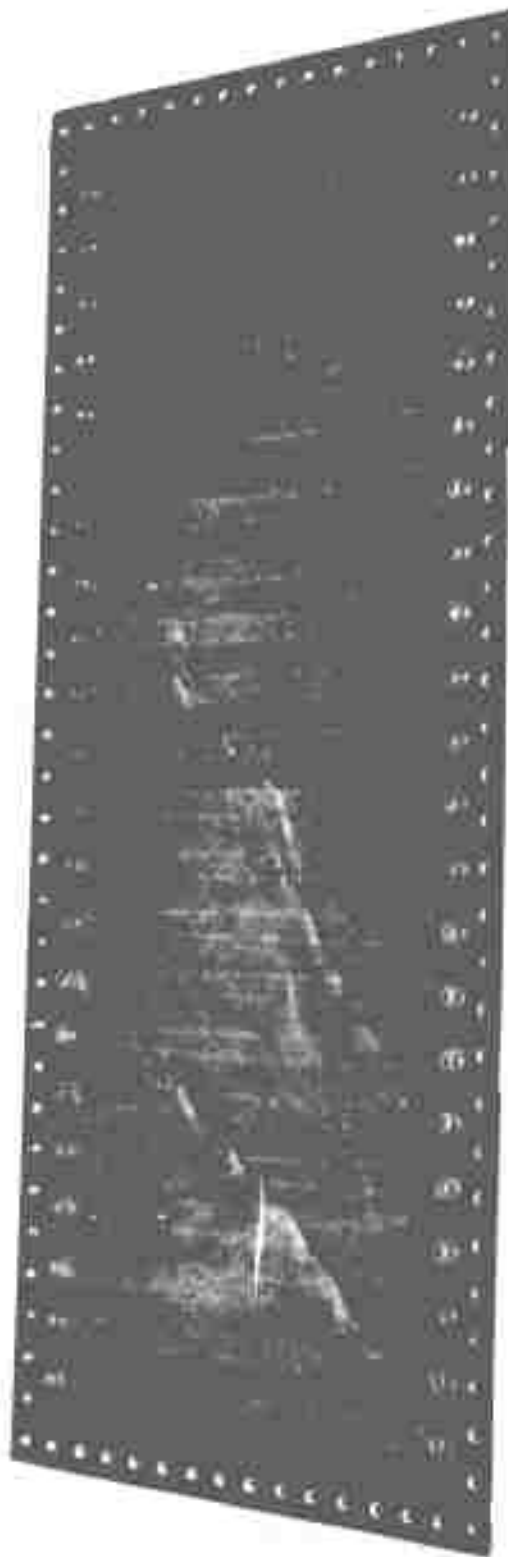
8-1 BUREAU WED PANEL 25-80578-6 LOT 1
24-62 24110853



DATE	ERD	6-13-72	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-3	EWA
CHECK					CORRUGATED SHEAR WEB TESTS ~	5-652
APPD	J.P.O.	5-8-73			CONTROL SURFACE PANELS	D2-80081
APPD					BOEING AIRPLANE COMPANY	PAGE
						FIG. 59

76

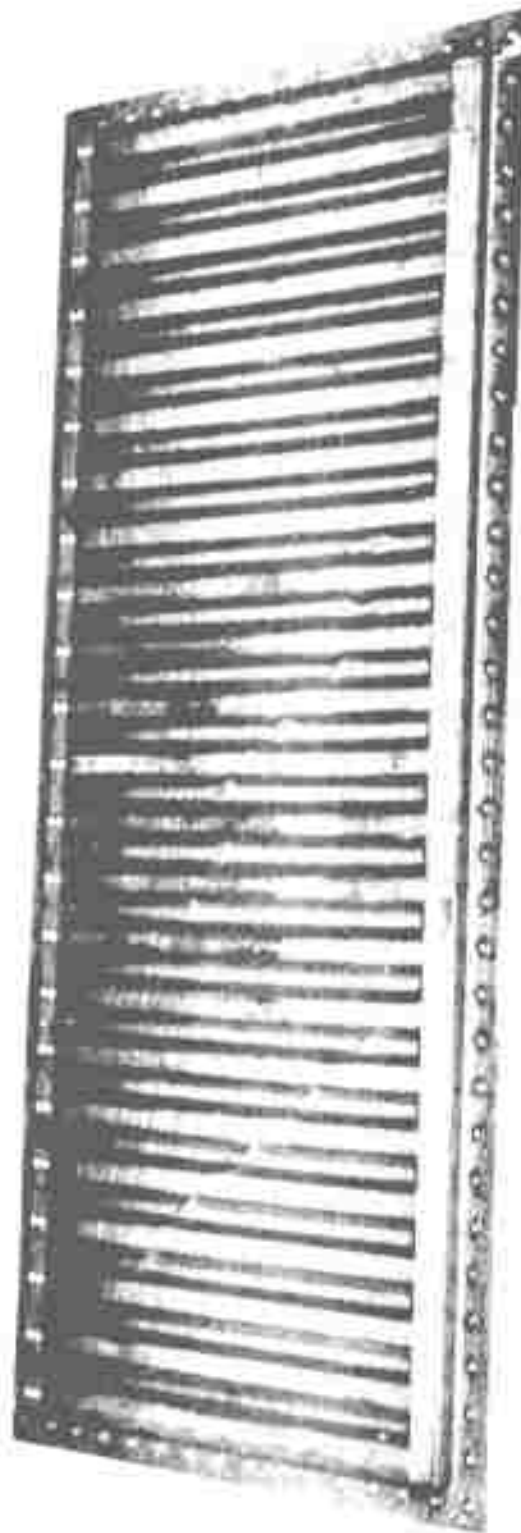
1 SHEAR WEB PANEL, 25-80578-1 LOT 5
3-24-62 2411055



CALC	<i>EPL</i>	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-4 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS	EWA 5-652
CHECK						
APPD	<i>J.F.O.</i>	5-8-3			BOEING AIRPLANE COMPANY	D2-80081
APPD						PAGE FIG. 60

77

5-I SHEAR WEB PANEL 25-8078-1 LOT 5
 5-24-62 24110854



CALC	<i>ELL</i>	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-4 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS AIRPLANE COMPANY	EWA 5-652
CHECK						
APPD	<i>JFO</i>	58-3				02-80081
APPD						PAGE FIG. 61

U3 4036 3000 (WAS BAC 973D-R3)

2-7000

2411111

25-80578-1 LOT 3

5

29



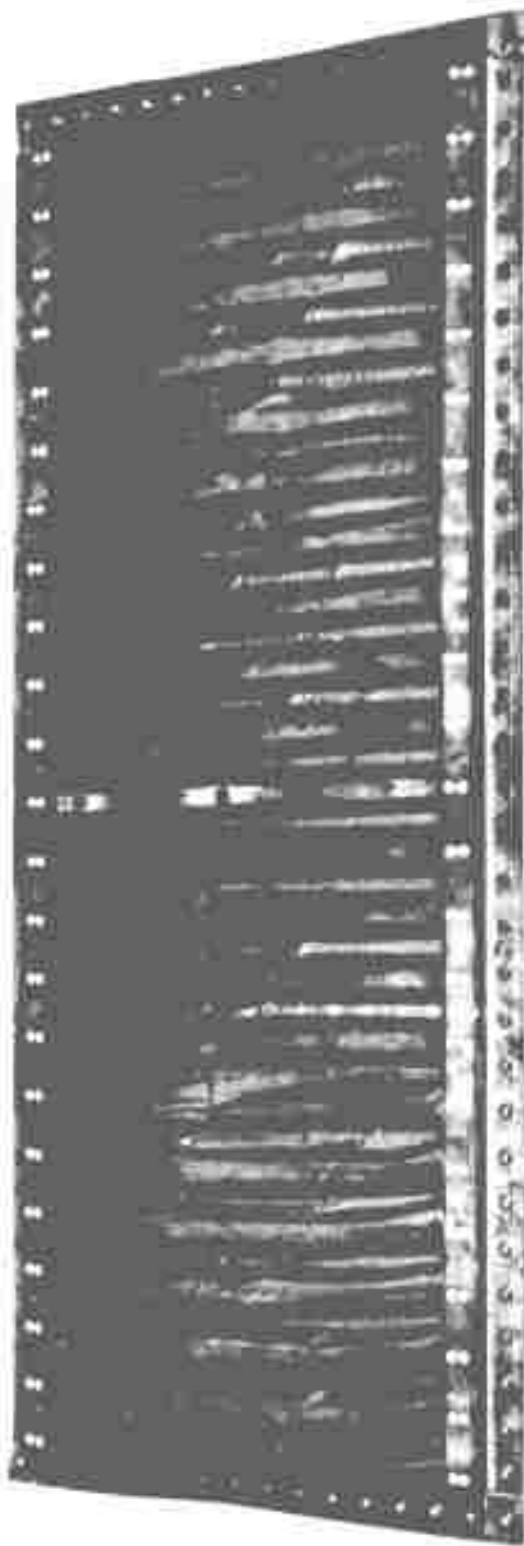
CALC	BEA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-5 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						02-80081
APPD	JLO.					
APPD						
						PAGE FIG. 62

U3 4036 3000 (WAS BAC 973D-R3)

2-7000

SHEAR WEB PANEL 25-80578-1 LOT 3
-62

80



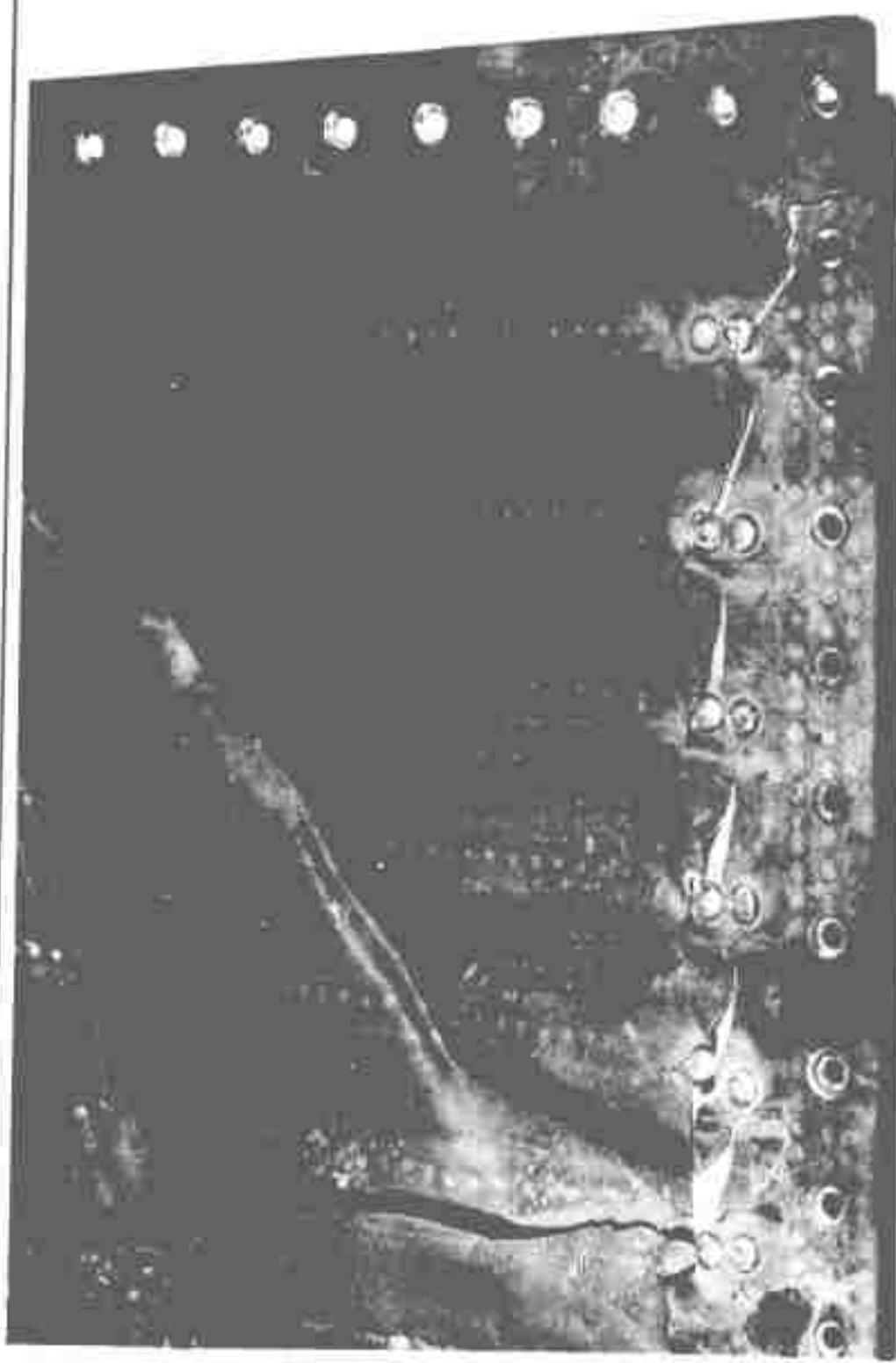
CALC	EPA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-5 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS +	EWA
CHECK						5-652
APPD	J.P.O.					02-80081
APPD						
					BOEING AIRPLANE COMPANY	PAGE
						FIG. 63

U3 4036 3000 (WAS BAC 973D-R3)

2-7000

20111108
 5-28-60
 -2-1 SHEAR WEB PANEL 25-80578-1 LOT #3

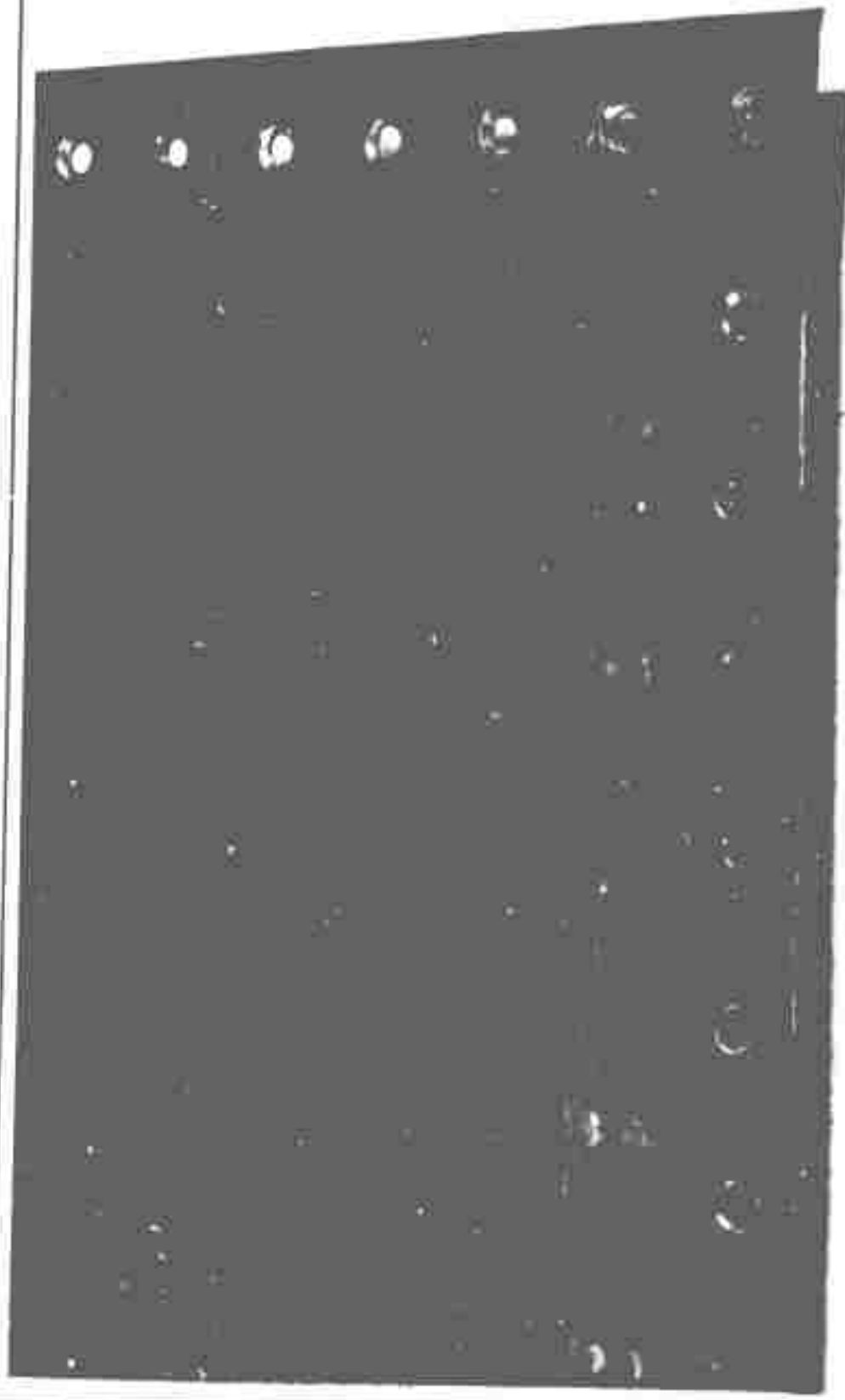
81



DATE	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT S652-6-5	EWA
CHECK				CORRUGATED SHEAR WEB TESTS ~	5-652
APPRO				CONTROL SURFACE PANELS	02-80081
APPRO				BOEING AIRPLANE COMPANY	PAGE
					FIG. 64

SHEAR WEB PANEL 25-50578-1 LOT 3 2411109 5-62

82

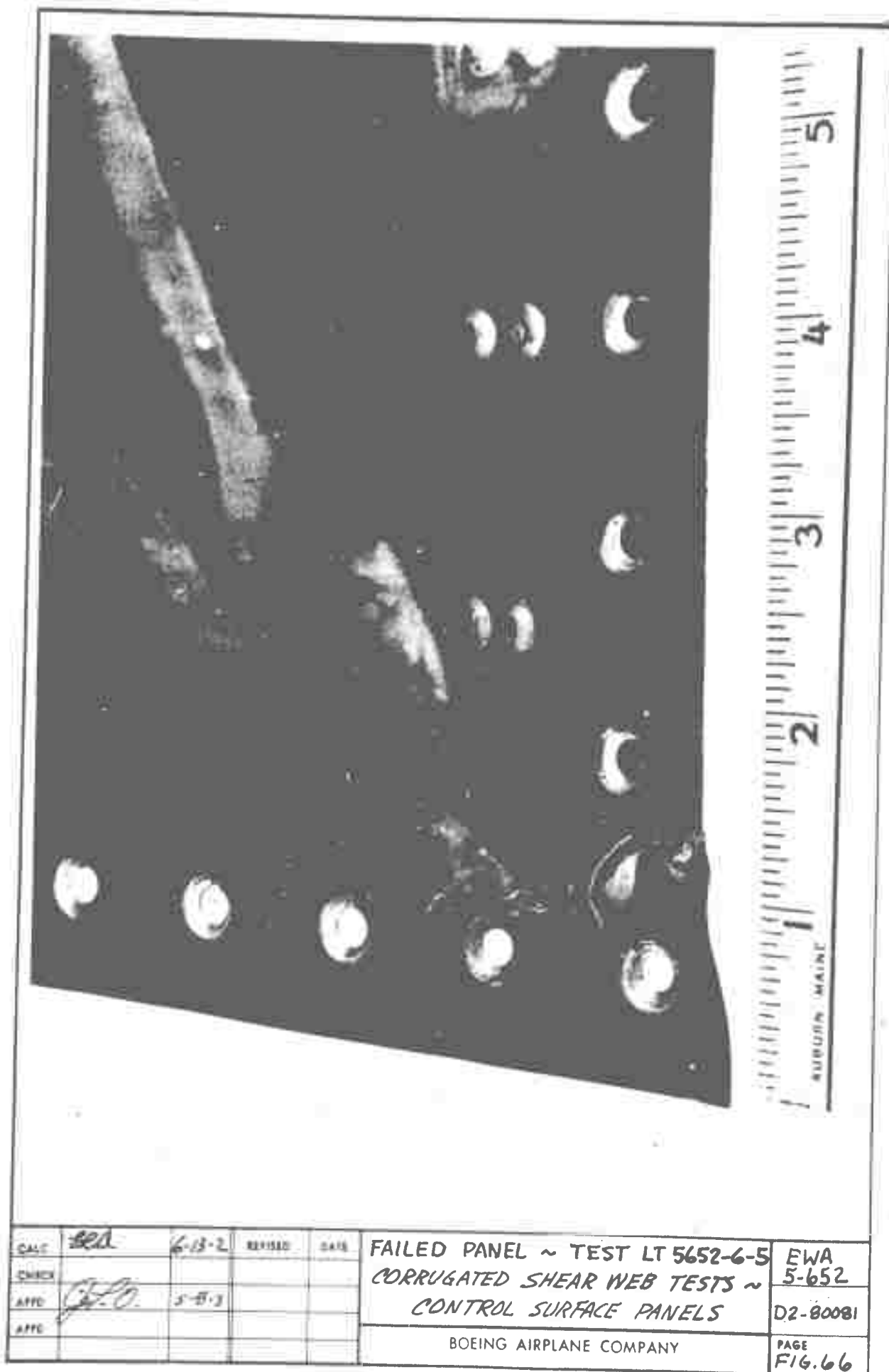


"falcon"

CALE	<i>ERD</i>	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-5 CORRUGATED SHEAR WEB TESTS CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						02-80081
APPD	<i>J.L.O.</i>					
APPD						
						PAGE FIG. 65

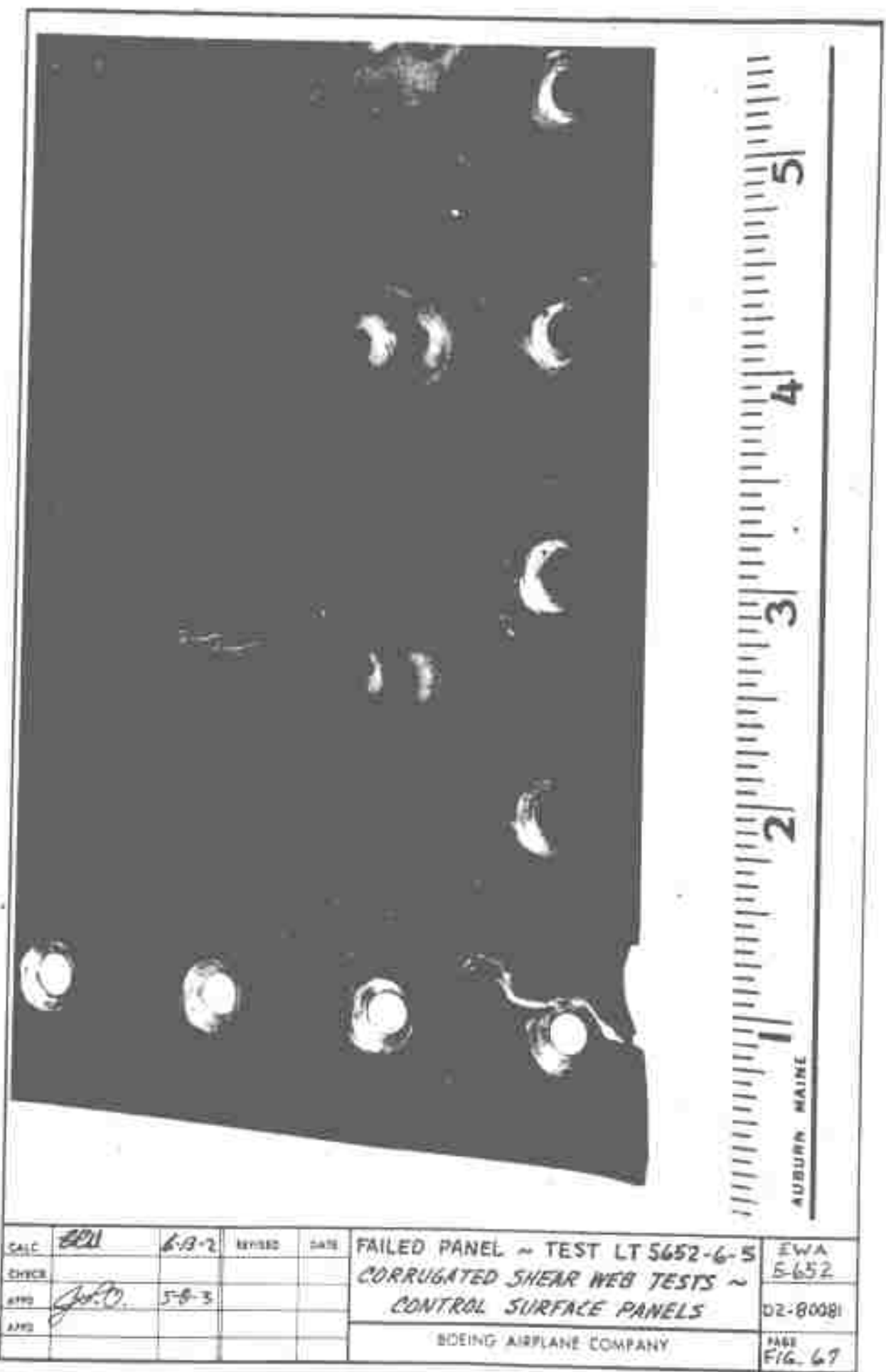
2011107
 15-1 REPAIR WEB PANEL 25-80578-1 LOT 3
 5-28-62

83



IN REAR WEB PANEL 25-80578-1 LOT 3 2411106
5-25-62

84



CALC	<i>EWA</i>	<i>6-8-2</i>	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-5 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BIDEING AIRPLANE COMPANY	EWA E-652
CHECK						02-80081
BY	<i>J.D.</i>	<i>5-8-3</i>				PAGE FIG. 67

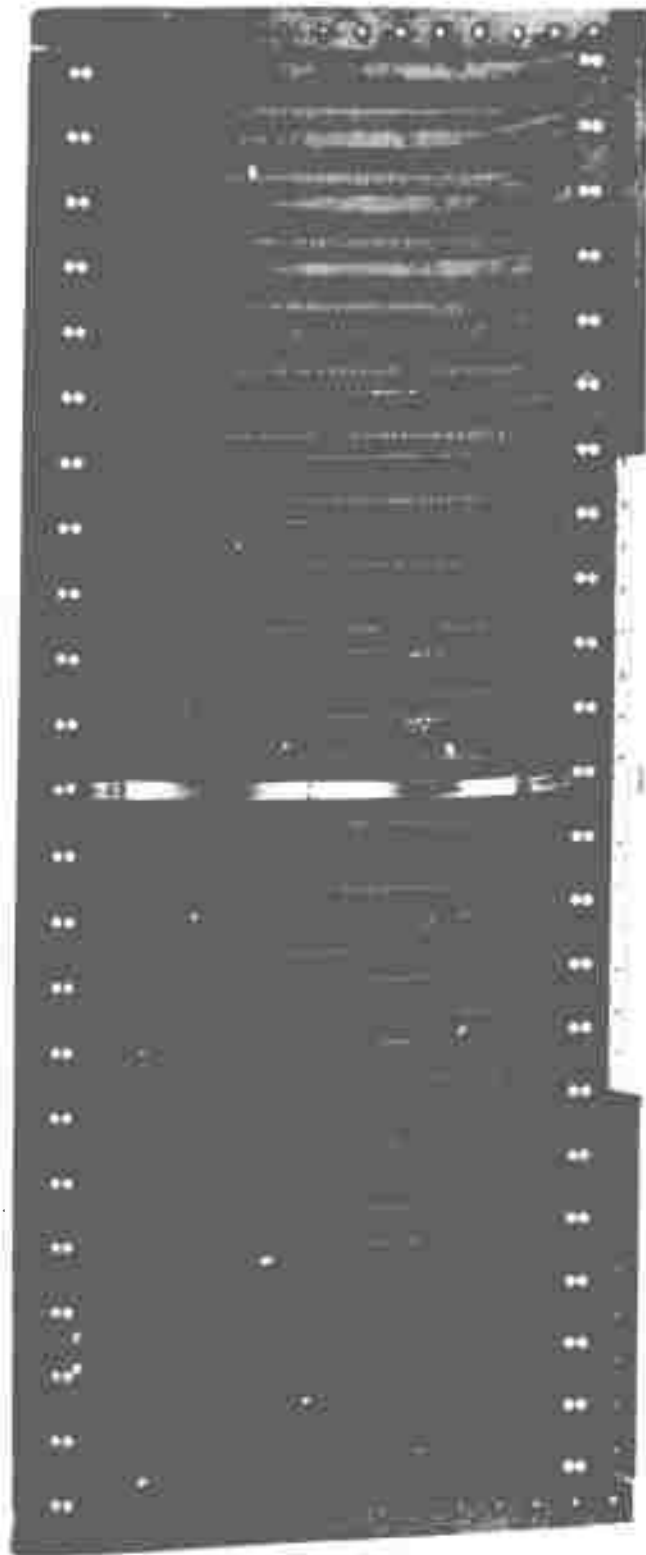
19-1 SHEAR WEB PANEL 25-80578-1 LOT 2
TOP VIEW 2411105
5-68-68

85



CALC	<i>ERO</i>	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-6 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS	FWA 5-652
CHECK						
APPD	<i>JLO.</i>					02-80081
APPD						PAGE FIG. 68
					BOEING AIRPLANE COMPANY	

DS-1 SHEAR WEB PANEL 25-80978-1 LOT 2
 BOTTOM VIEW
 3-28-62
 24111103



CALC	<i>ED</i>	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-6 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY.	EWA
CHECK						5-652
APPD	<i>JFO.</i>					D2-80081
APPD						PAGE FIG. 69

86

2411104
 I EAR WEB PANEL 25-8078-1 LOT 2
 CL UP 5-28-62

87

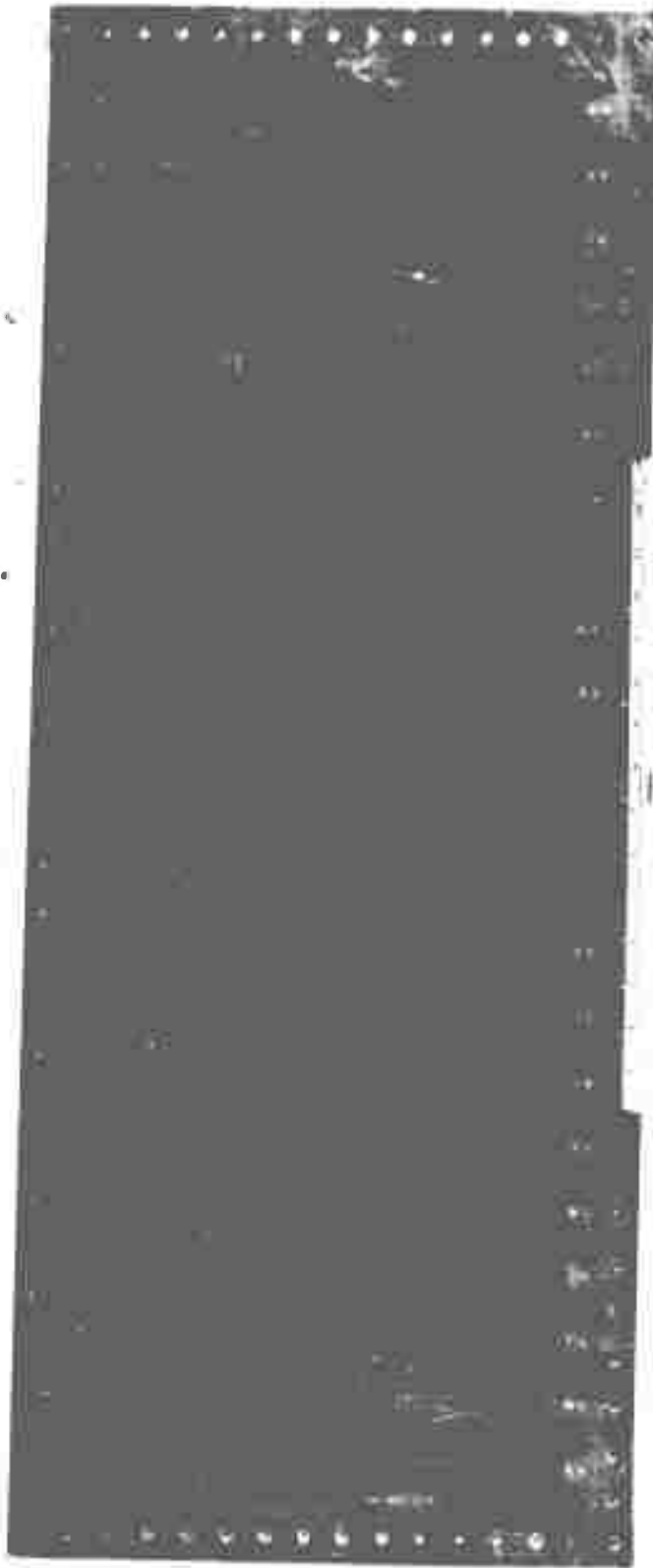


CALC	EPA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-6 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA
CHECK						5-652
APPD	Geo.					DR-80081
APPD						PAGE FIG. 70

U3 4036 3000 (WAS BAC 973D-R3)

2-7000

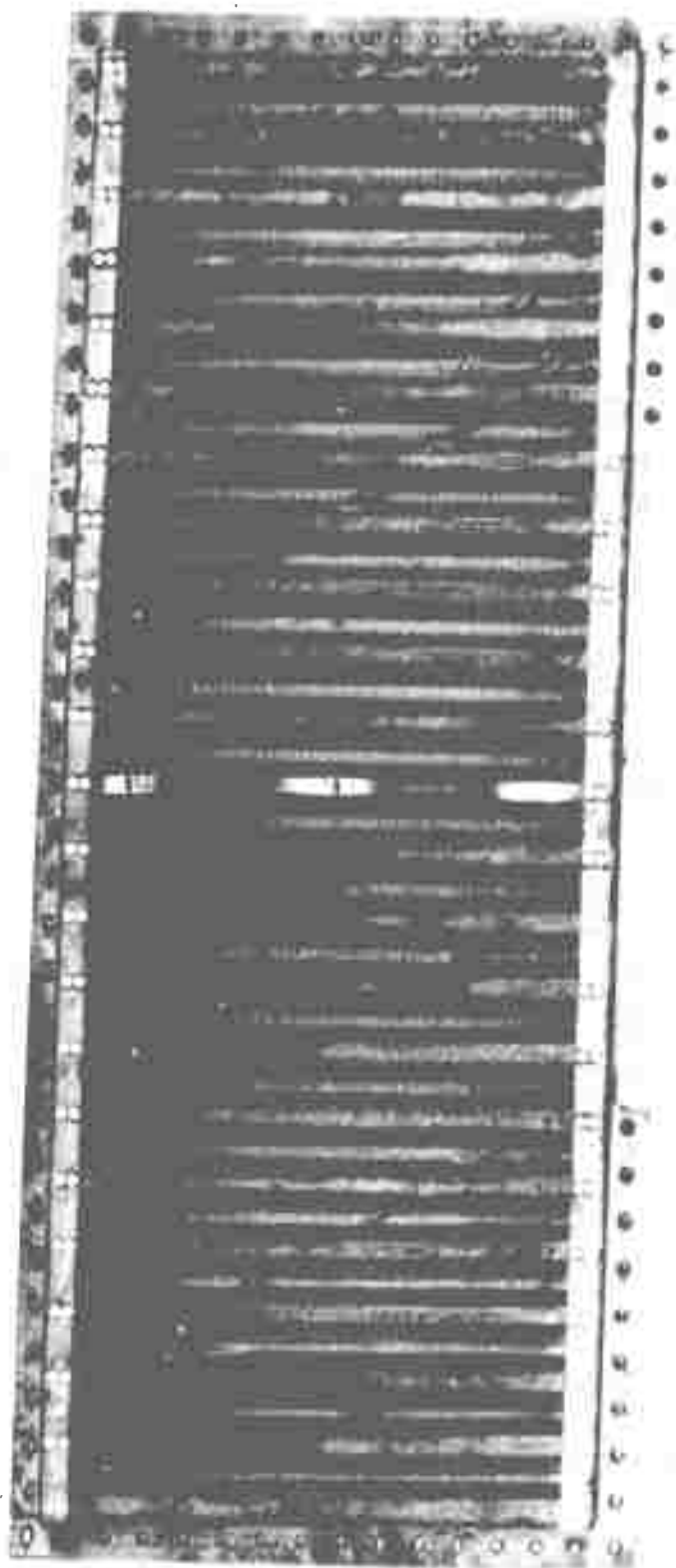
DO-17 SHEAR WEB PANEL 25-80578-1 LOT 7
2-88-02
2411100



CALC	BRD	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-7 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS	EWA 5-652
CHECK						D2-80081
APPD	JLO.					
APPD						
					BOEING AIRPLANE COMPANY	PAGE FIG. 71

10-1 SHEAR WEB PANEL 25-80576-1 LOT 7
BOTTOM VIEW
5-8-62

89



CALC	ERS	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-7 CORRUGATED SHEAR WEB TESTS CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						DR-80081
APPD	J.P.O.					
APPD						
						PAGE FIG. 72

U3 4036 3000 (WAS BAC 973D-R3)

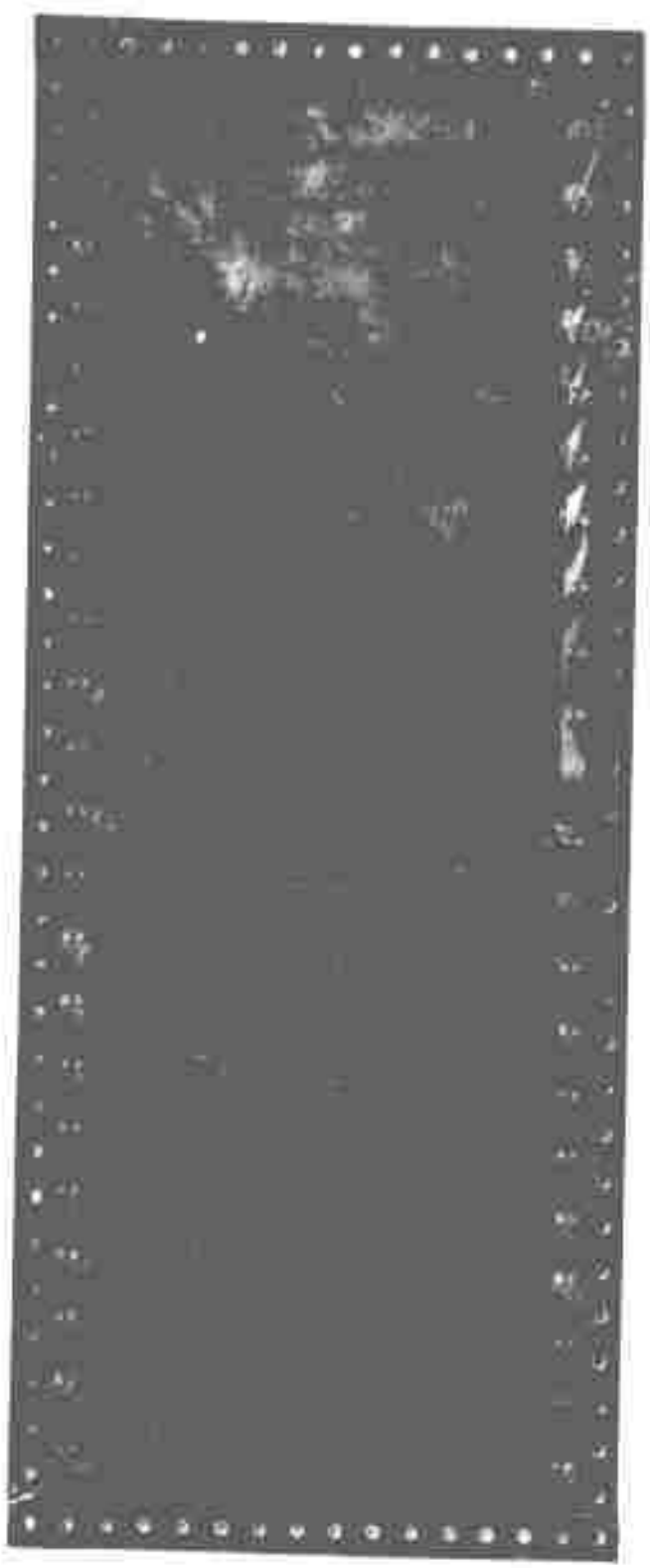
2-7000

2011108
 25-80078-1 LOT 7
 5-28-62



DATE	6-13-62	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-7 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK					D2-80081
APPRO					PAGE
APPRO					FIG. 73

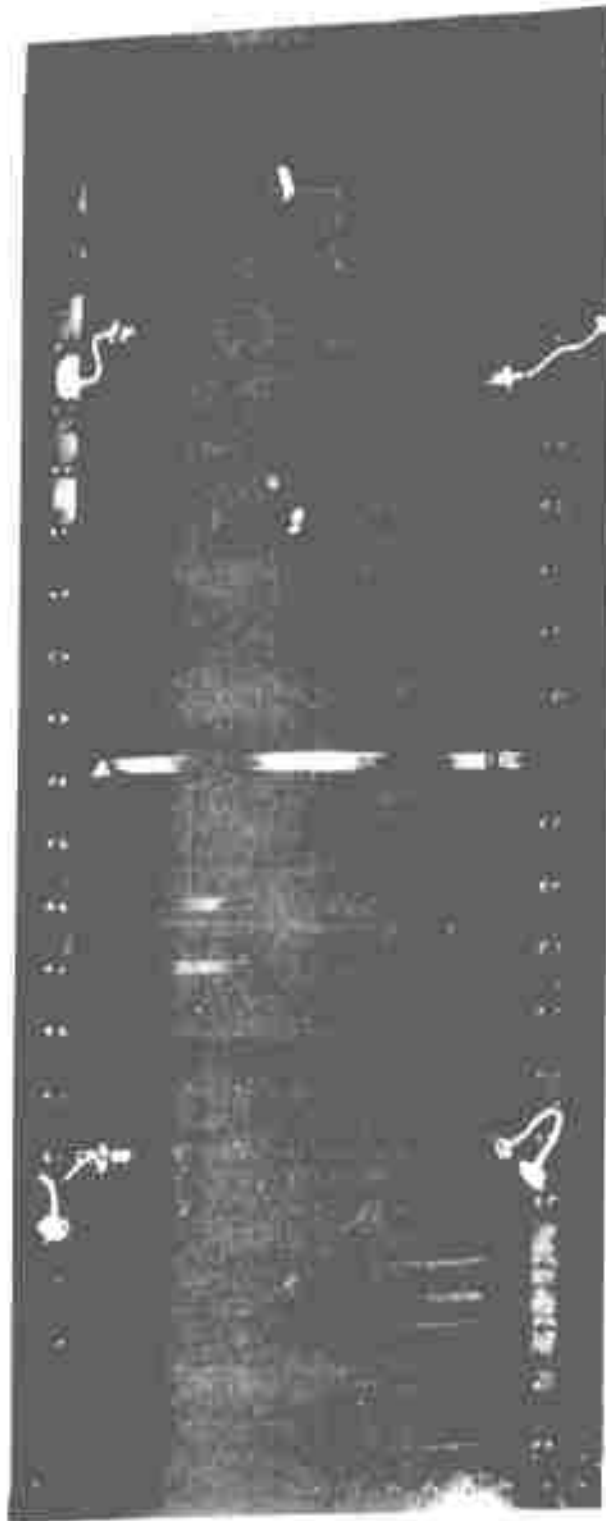
SHEAR WEB PANEL - 25-80578-1 LOT 1
 2-31-62 24111456



CALC	801	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-8 CORRUGATED SHEAR WEB TESTS ~ CONTROL SURFACE PANELS BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						D2-80081
APPD	9-10					
APPD						
						PAGE FIG. 74

2411157
 25-80576-1 LOT 1
 5-31-62

92



CALC	ERA	6-13-2	REVISED	DATE	FAILED PANEL -	ST LT 5652-6-8	EWA
CHECK					CORRUGATED SHE	WEB TESTS ~	5-652
APPD	AD				CONTROL SUP	PANELS	D2-80081
APPD							PAGE
						COMPANY	FIG. 75

24111455

REAR WING PANEL 25-8075-1 LOT 1
OF DAMAGE 5-31-62

27

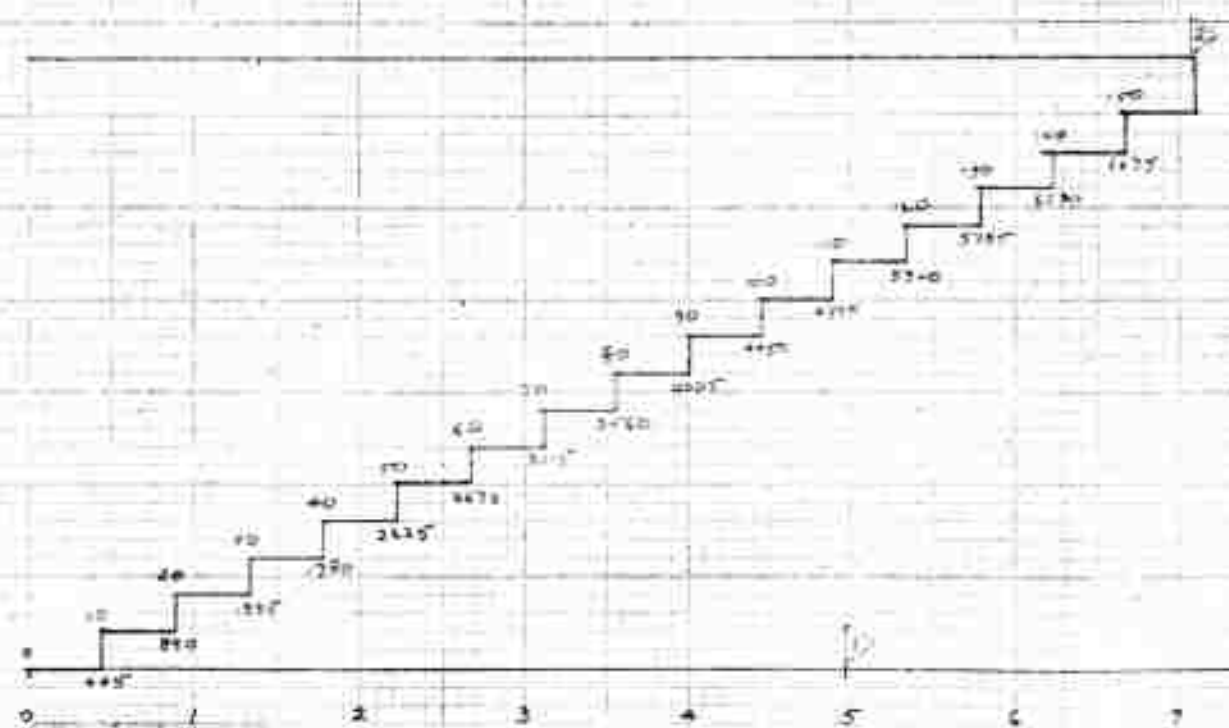


CALC	ERA	6-13-2	REVISED	DATE	FAILED PANEL ~ TEST LT 5652-6-8	EWA
CHECK					CORRUGATED SHEAR WEB TESTS ~	5 652
APPD	<i>[Signature]</i>				CONTROL SURFACE PANELS	DZ. 80061
APPD					BOEING AIRCRAFT COMPANY	PAGE FIG. 76

U3 4036 3000 (WAS BAC 973D-R3)

4 7000

1



LOAD ~ THOUSANDS OF POUNDS

CRAN
SH. MO
CIB

A-Y PLOTTER *5 BAL 157510

2

WAVE - LOAD 10/5 BAR *147

FUNCTION - STRAINOMETER - NORM

BAL SWITCH - 50K

BRIDGE SWITCH - 2 ARM

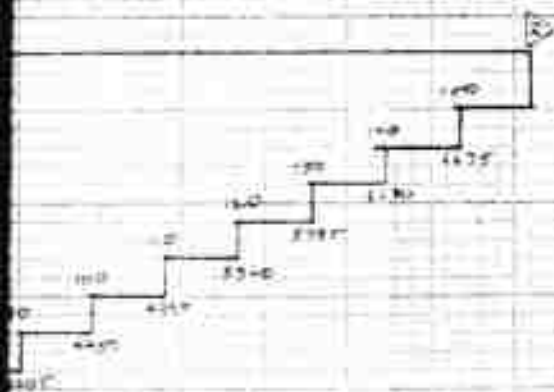
BRIDGE VOLTAGE - 20 V

WAVE OFFSET BY HAND

50 STRAINOMETER DIVISIONS

NOTE: NUMBERS WRITTEN ABOVE
LOAD STEPS ARE LOAD IN %
NUMBERS BELOW ARE LOAD IN
POUNDS

STELIMEN DID NOT BREAK
UNLOADED BY HAND



POUNDS OR POUNDS

GRAM 6-44

34 VOLT (2000)

CL 6-44

LOAD DATA

EWA

DI SHEAR WEB AND PANEL

5-652

TEST LT 5652-1-1

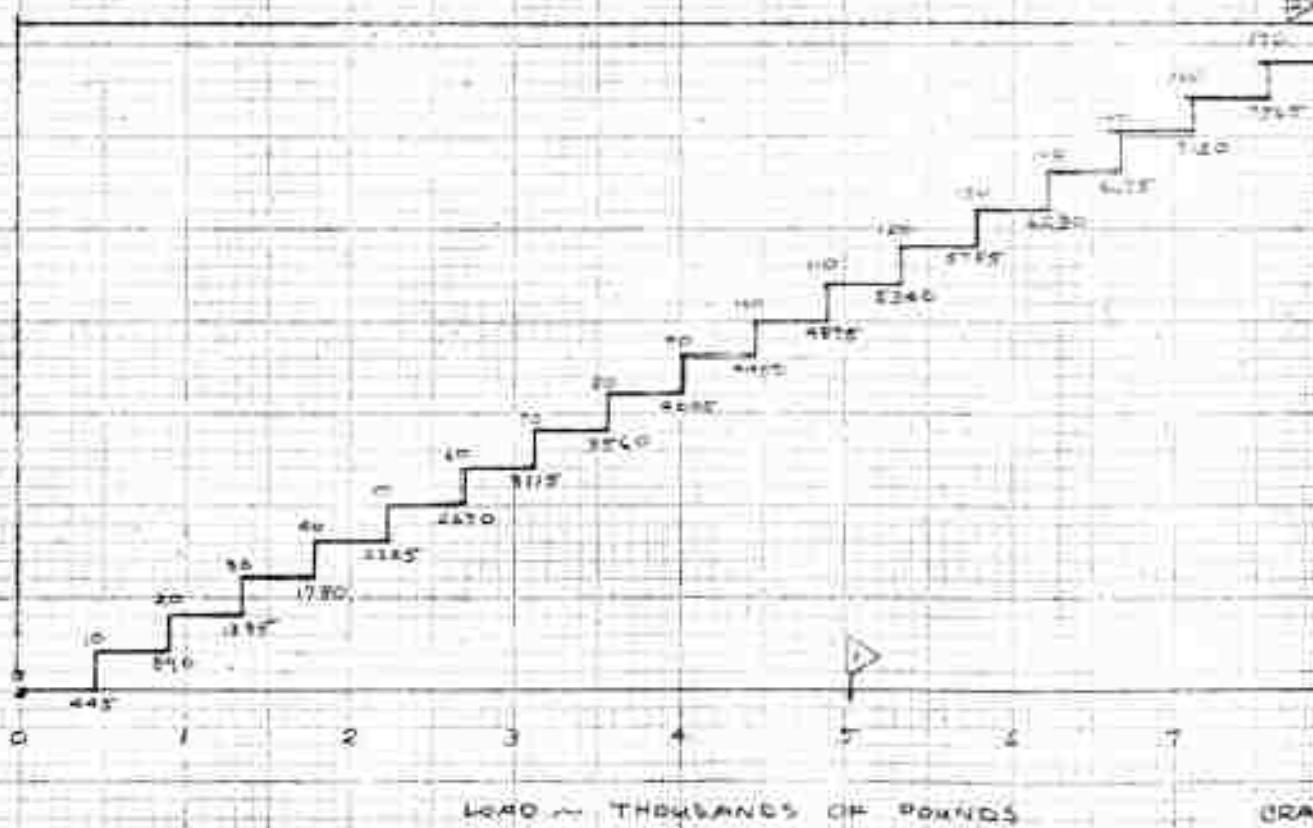
TEST DATE 5-3-62

DZ-80081

FIG. 77

1

ELECTRO-TECHNICALS, INC.
 1015 10th Avenue
 New York 17, New York



LOAD - THOUSANDS OF POUNDS

GRA
 1015 10th Ave
 New York 17, New York

X-Y PLOTTER #5 BAC 15710

X-AXIS - LOAD 10/15 BAR #147

FUNCTION - STRAINOMETER - NORM

BAL. SWITCH - 50 K

BRIDGE SWITCH - 2 ARM

BRIDGE VOLTAGE - 20.0 V.

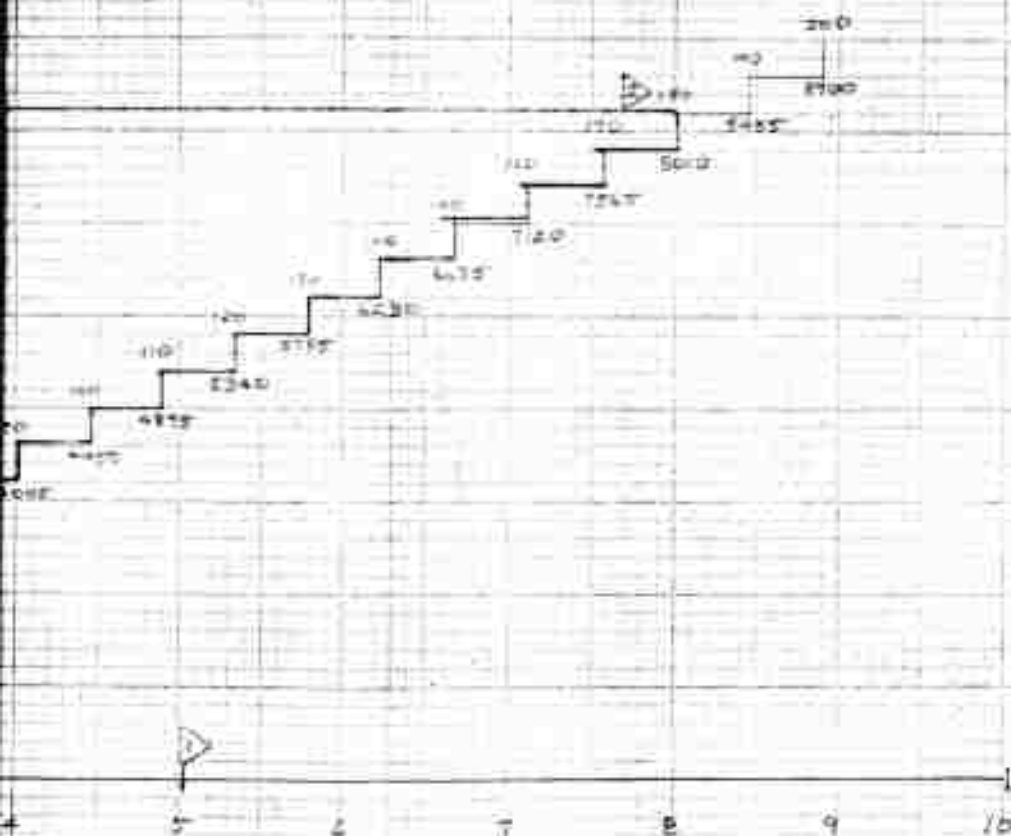
TRANS - OFFSET BY HAND.

2

▷ 30 STRAINOMETER DIVISIONS

NOTE: NUMBERS WRITTEN ABOVE
LOAD STEPS ARE LOAD IN %;
NUMBERS BELOW ARE LOAD IN
POUNDS.

▷ SPECIMEN DID NOT BREAK
UNLOADED BY HAND.



POUNDS OF POUNDS

GRAM 6-18-62

SHIMING 6-18-62

CLUB 6/18/62

LOAD DATA

EWA

DS SHEAR WEB AND PANEL

5-652

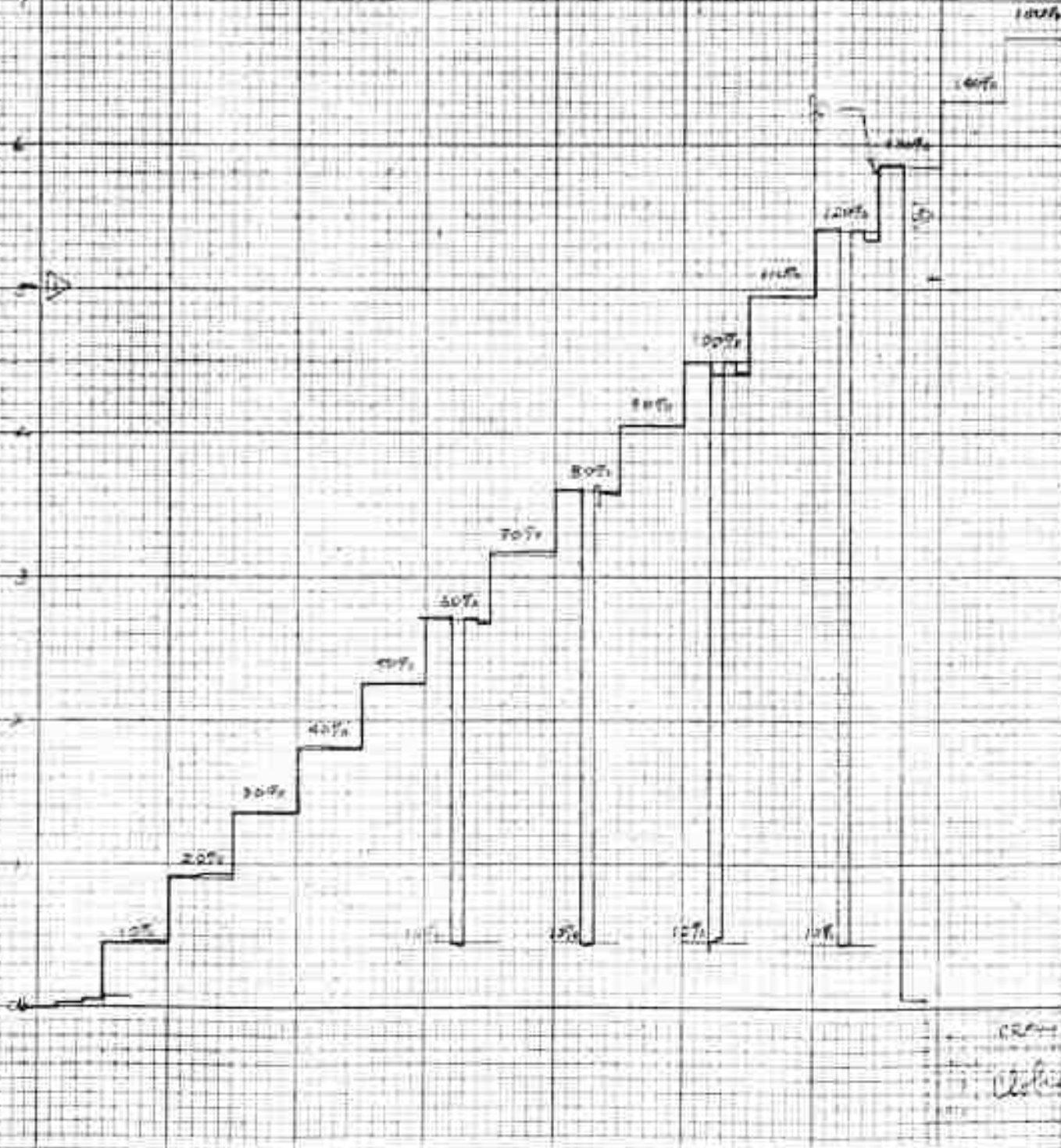
TEST LT-5752-1-2 TEST DATE 6-6-62 D2-80081

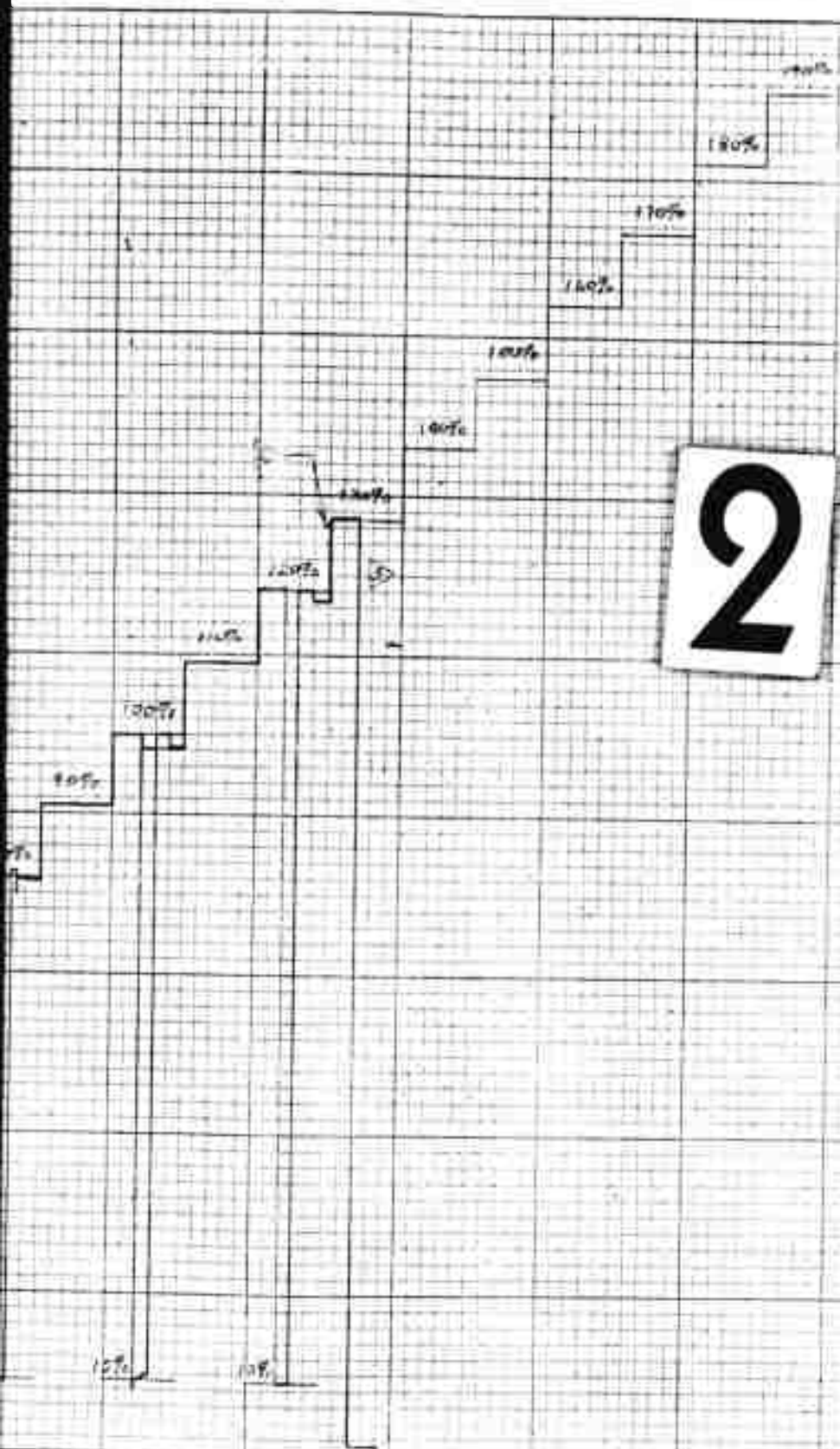
FIG 78

1

10-2 10.8 TO THE (MEN
350-50
400-40

LEAD ~ THOUSANDS OF POUNDS





X-Y PLOTTER "B" BAC 152510
 X-AXIS - OFF SET 31 FAN D.
 Y-AXIS - LOAD-DYN BAR 142 (19/12)
 FUNCTION - STRAINOMETER-NORM
 BRIDGE VOLTAGE - 20.0 VOLTS
 BAL. SWITCH 5PK
 BRIDGE SWITCH 2ARM
 CABLE - #116

50 STRAINOMETER DIVISIONS.
 FIRST SIGN OF BUCKLES ON
 WEB APPEARED AT THIS POINT
 LOAD IS 5200 LBS.

3 SPECIMEN UNLOADED BY HAND.

NOTE: RETURN TO 0 TO RESET
 PANEL BUCKLES
 SLIGHT DROPS IN LOAD OCCURRED
 AT THIS LOADS DUE TO A
 LEAKY JACK.

2

GRAPH TITLE
 11/1/52

LOAD DATA
 DE. MARKING AND PANEL
 TEST 21-642-1-3

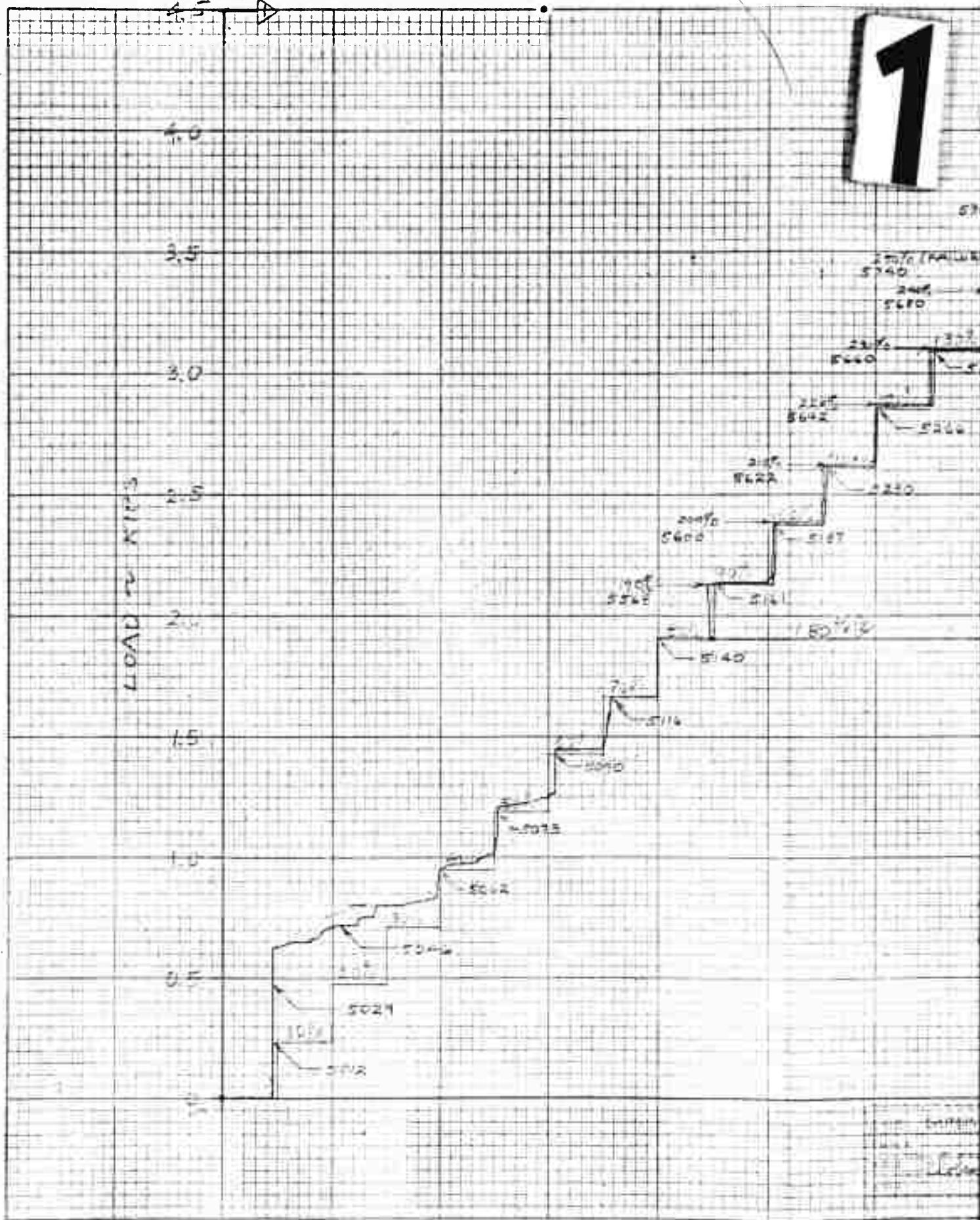
EWA
 5-652
 02-80081

THE JOING COMPANY

FIG. 79

10 X 10 TO THE INCH 359-5L
KEUFFEL & ESSER CO. NEW YORK, N. Y.

99



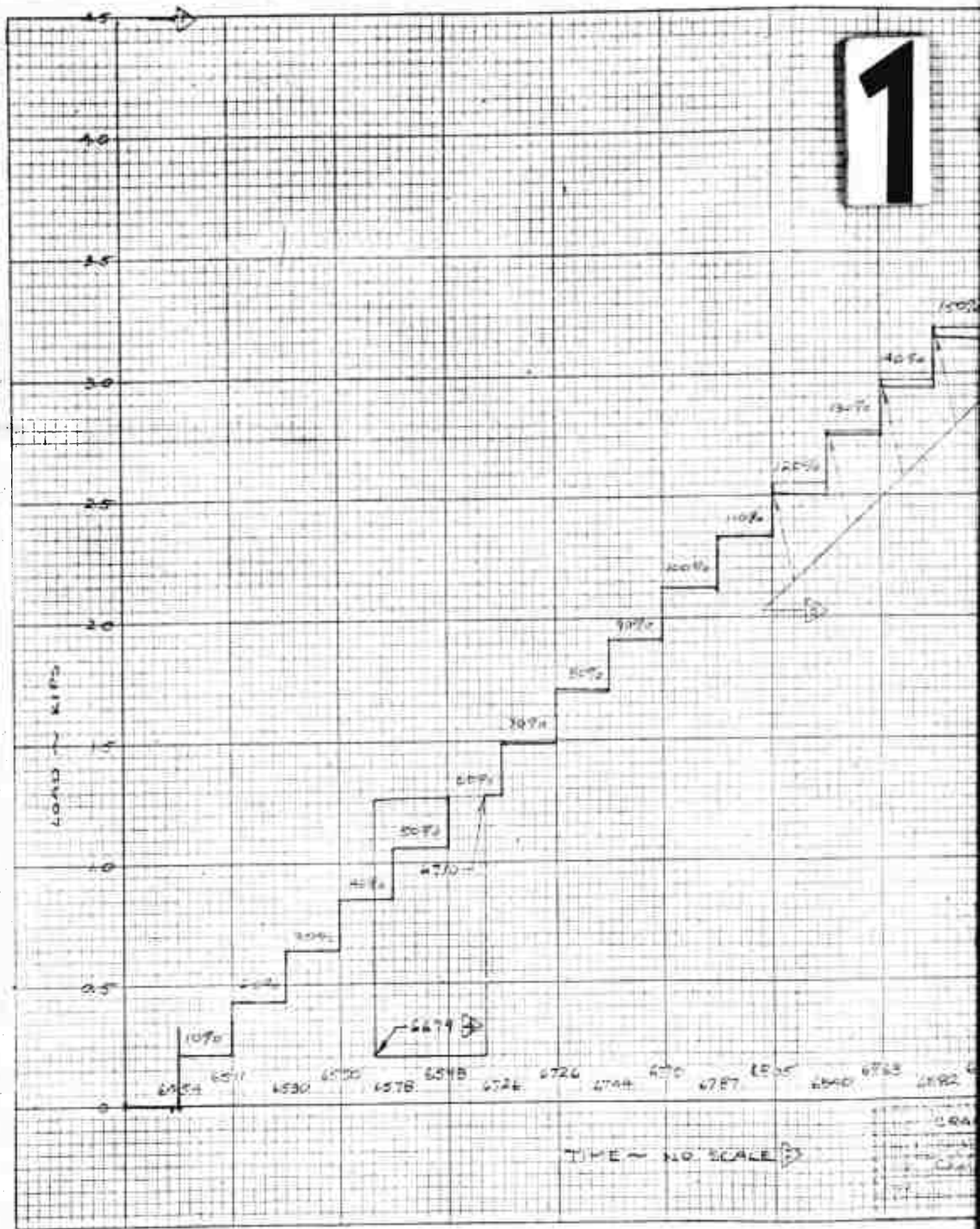
1

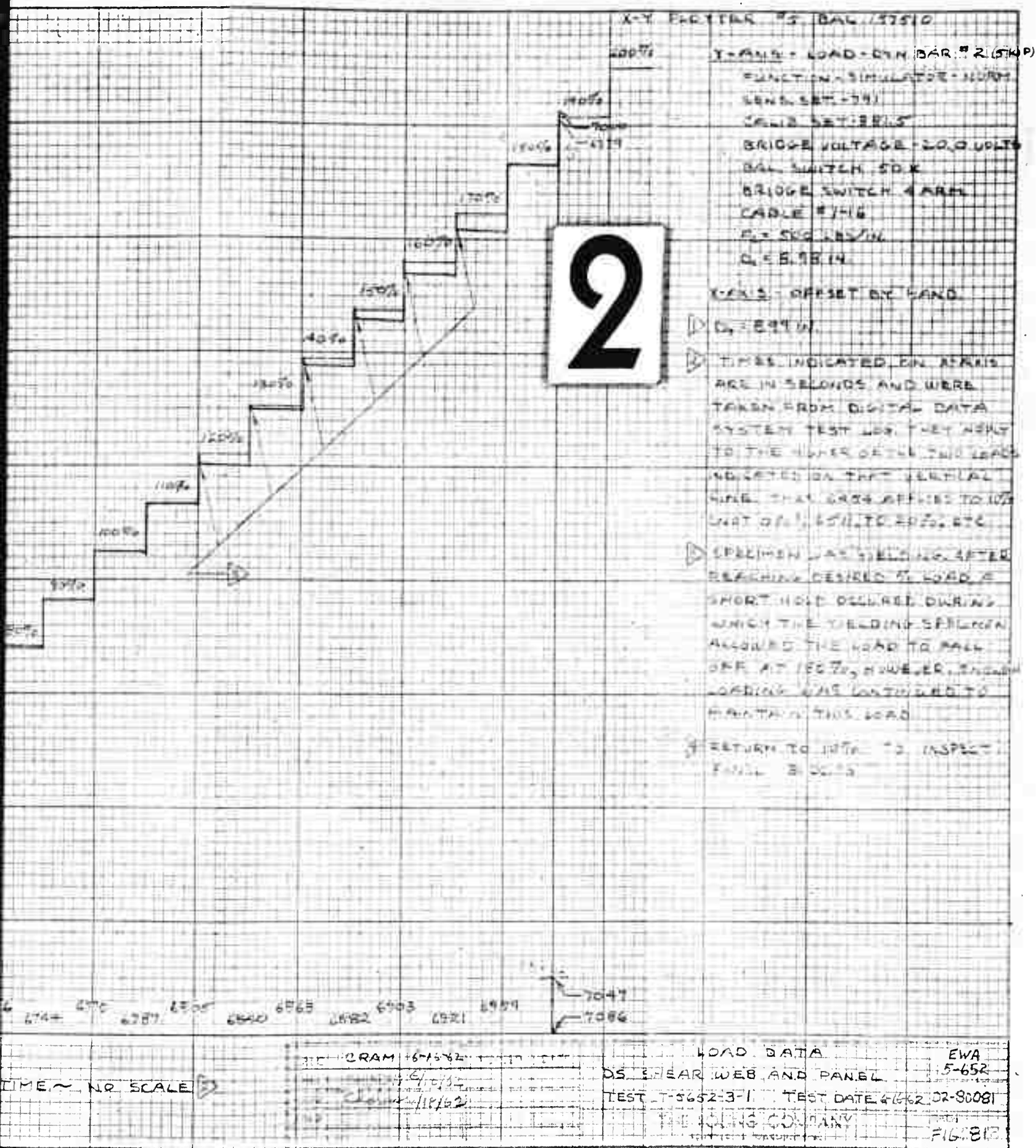
359-5L
"AS IN U.S.A."

10 X 10 TO THE INCH
KEUFFEL & ESSER CO.

K-2

88





X-Y PLOTTER #5 BAL 197510

Y-AXIS - LOAD - DYN BAR # 2 (5HP)

FUNCTION - SIMULATED - NORM

SENS. SET - 741

SCALE SET - 2000

BRIDGE VOLTAGE - 20.0 VOLTS

BAL SWITCH - 50X

BRIDGE SWITCH - 4 AMP

CABLE #116

R - 500 LB/IN

Q - 5.98 IN

Y-AXIS - OFFSET BY HAND

Q - 5.98 IN

TIME INDICATED ON X-AXIS ARE IN SECONDS AND WERE TAKEN FROM DIGITAL DATA SYSTEM TEST LOG. THEY WERE TO THE LOWER OF THE TWO LEADS INDICATED ON THE VERTICAL LINE THAT CORRESPONDS TO 10% OF 1, 5, 10, 20, 40, ETC.

SPECIMEN WAS YIELDING AFTER REACHING DESIRED LOAD. A SHORT HOLD OCCURRED DURING WHICH THE YIELDING SPECIMEN ALLOWED THE LOAD TO FALL OFF AT 1800, HOWEVER, RELOADING WAS CONTINUED TO MAINTAIN THIS LOAD.

RETURN TO 10% "2" INSPECT FULL 300'S

GRAM 16-1582

LOAD DATA

EWA

DS SHEAR WEB AND PANEL

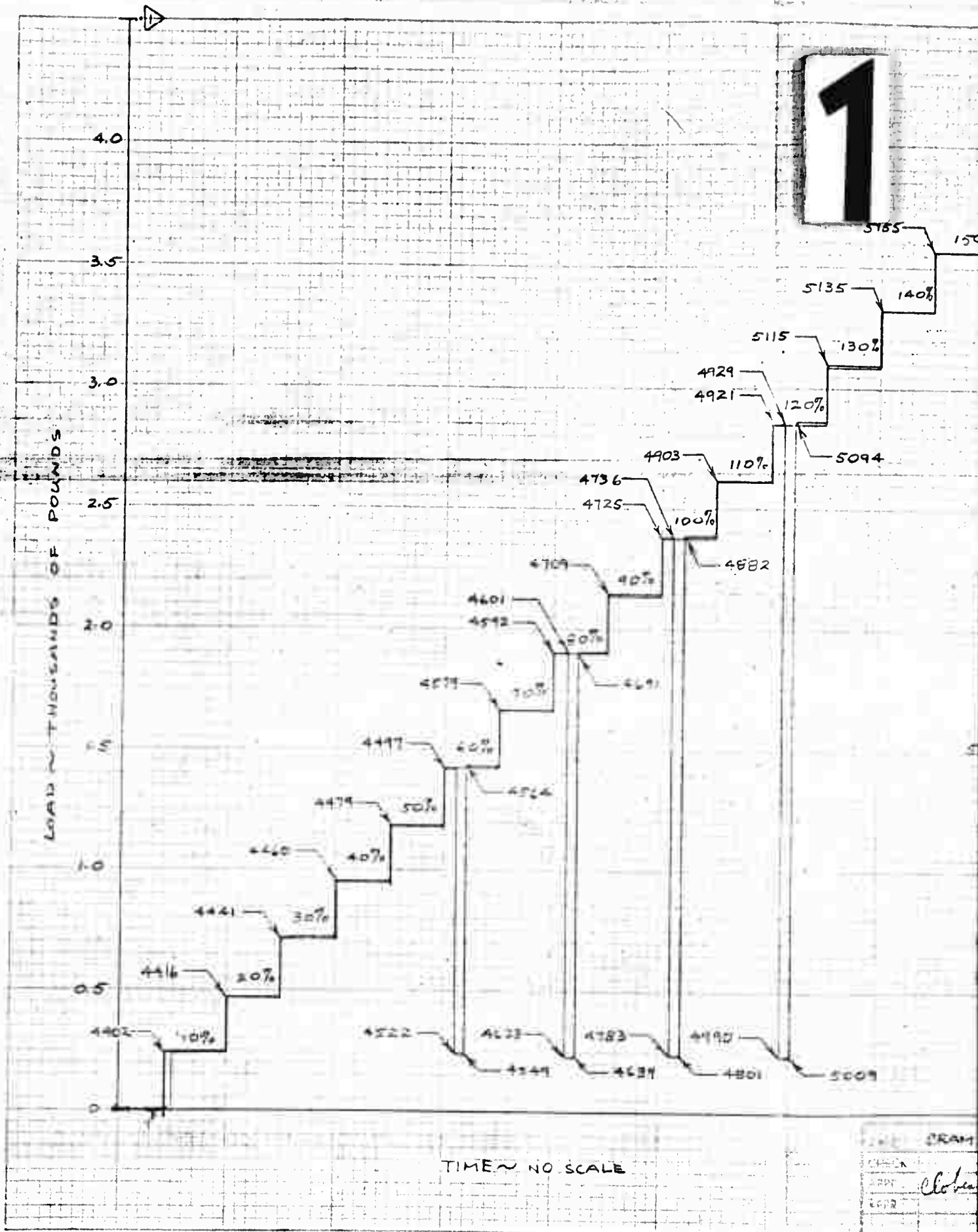
5-652

TEST - 5652-3-1 TEST DATE 4-6-62 02-80081

THE JOHNS COMPANY

FIG 812

1



X-AXIS - PLOTTER #5 DAC 1575.0

Y-AXIS - OFFSET BY HAND

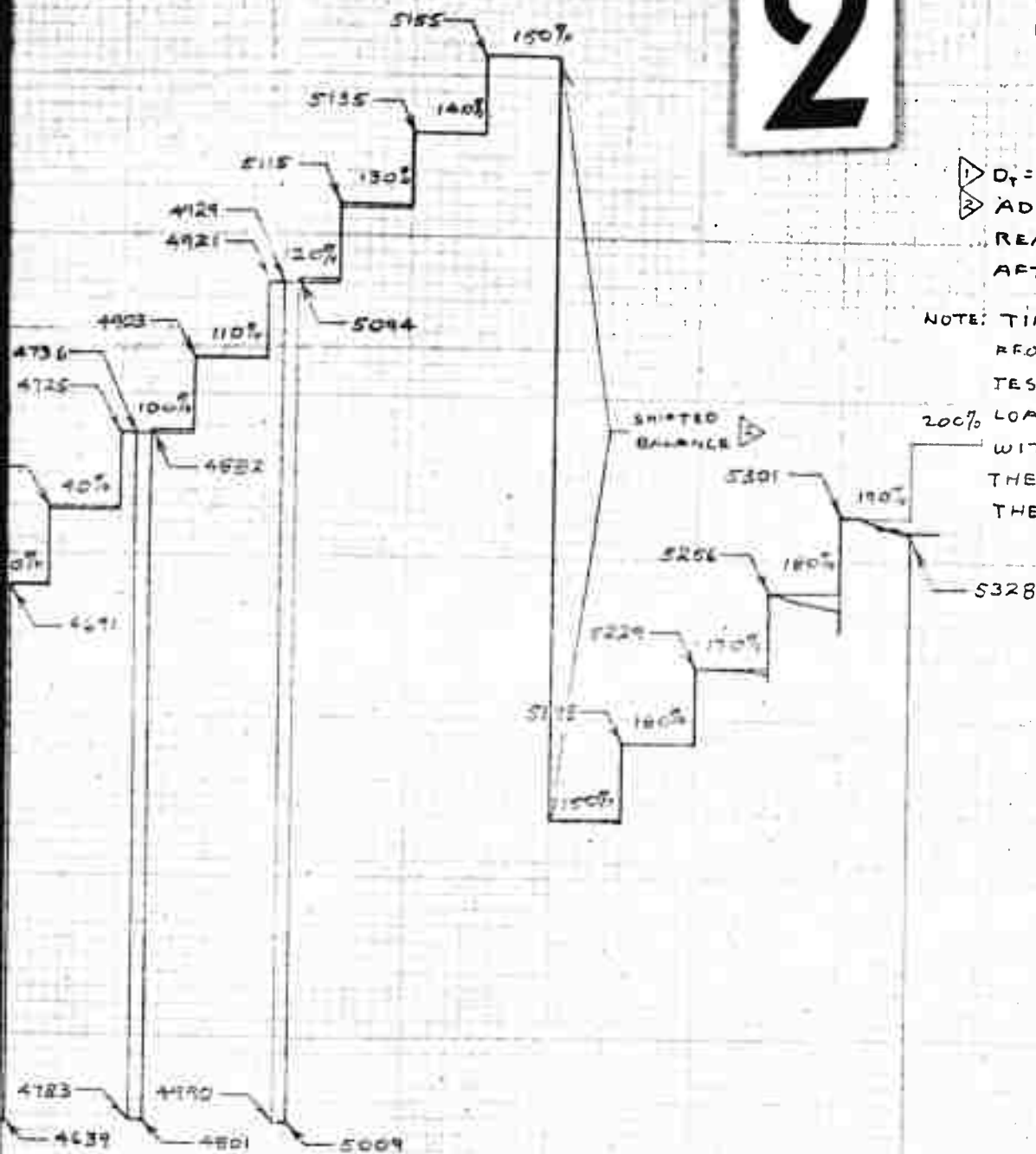
FUNCTION - SIMULATOR - NORM.

2

SENS. SET. - 791
CALIB. SET. - 881.5
BRIDGE VOLTAGE - 20.0 VOLTS
BAL. SWITCH - 4 ARM
CABLE #1-16
F_c = 500 LBS/IN.
D_c = 8.98 IN.

1 D_t = 9.00 IN.
2 ADD 2385 LBS. TO ALL LOAD READINGS TAKEN FROM SCALE AFTER THIS POINT.

NOTE: TIME IN SECONDS, AS TAKEN FROM DIGITAL DATA SYSTEM TEST LOG, IS INDICATED FOR EACH 200% LOAD BY A FOUR DIGIT NUMBER WITH AN ARROW DRAWN TO THE CORRESPONDING POINT ON THE LOAD CURVE.



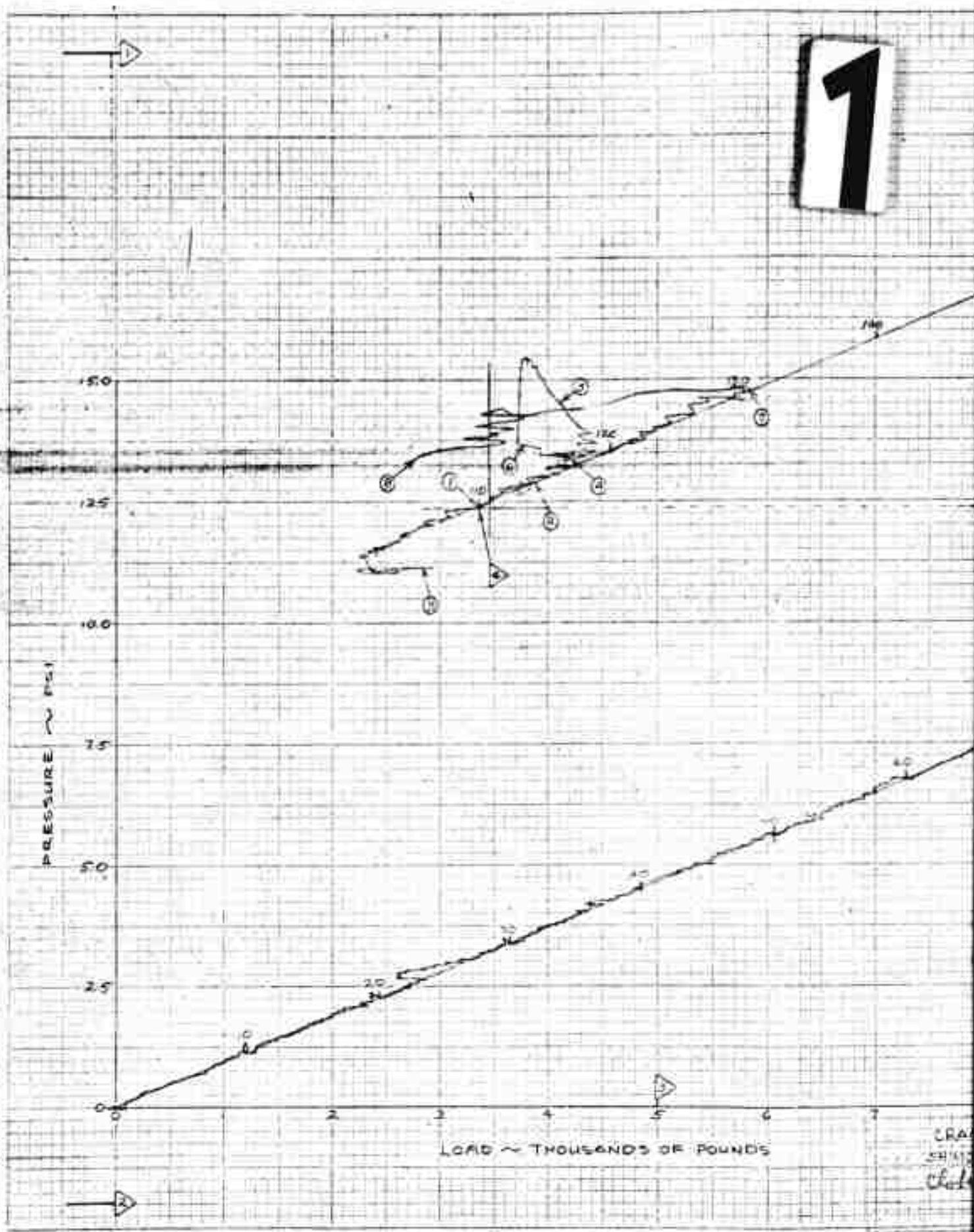
GRAM 6-1542

6/28/2

LOAD DATA
D.S. SHEAR WEB AND PANEL
TEST LT-5652-3-2 TEST DATE 6-28-62 D2-80081
JOHN HOLLING COMPANY
FIG BQ 3

TEST LT-5652-3-2 U3-4021 1000 6-28-62

1



CRA
SH
ch

X-Y PLOTTER BAL 168136

Y-AXIS - LOAD 10/40 DYN BAR #219

FUNCTION - STRAINOMETER NORM.

BAL. SWITCH - 50K

BRIDGE SWITCH - 2 ARM

BRIDGE VOLTAGE - 20 VOLTS

X-AXIS - PRESSURE PPU #2175

FUNCTION - SIMULATOR - NORM.

CALIB. SENS. - 945 DIVISIONS

SENS SET - 851 DIVISIONS

BAL. SWITCH - 50K

BRIDGE SWITCH - 4 ARM

BRIDGE VOLTAGE - 6.0 VOLTS

1 $D_t = 9.50$ IN. (NOTE: ZERO FOR

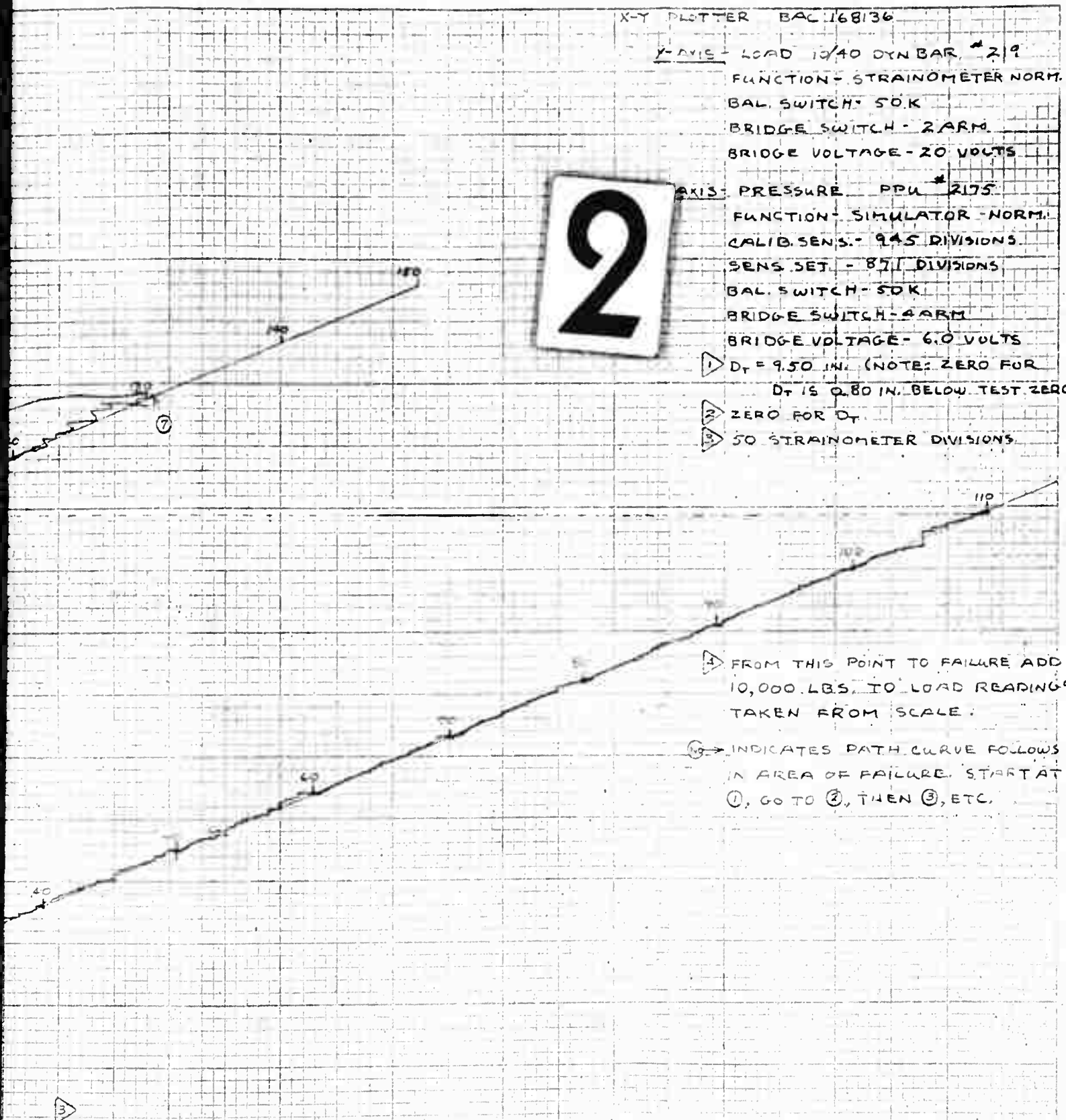
D_t IS 0.80 IN. BELOW TEST ZERO

2 ZERO FOR D_t

3 50 STRAINOMETER DIVISIONS

4 FROM THIS POINT TO FAILURE ADD 10,000 LBS. TO LOAD READINGS TAKEN FROM SCALE.

5 INDICATES PATH CURVE FOLLOWS IN AREA OF FAILURE. START AT 1, GO TO 2, THEN 3, ETC.

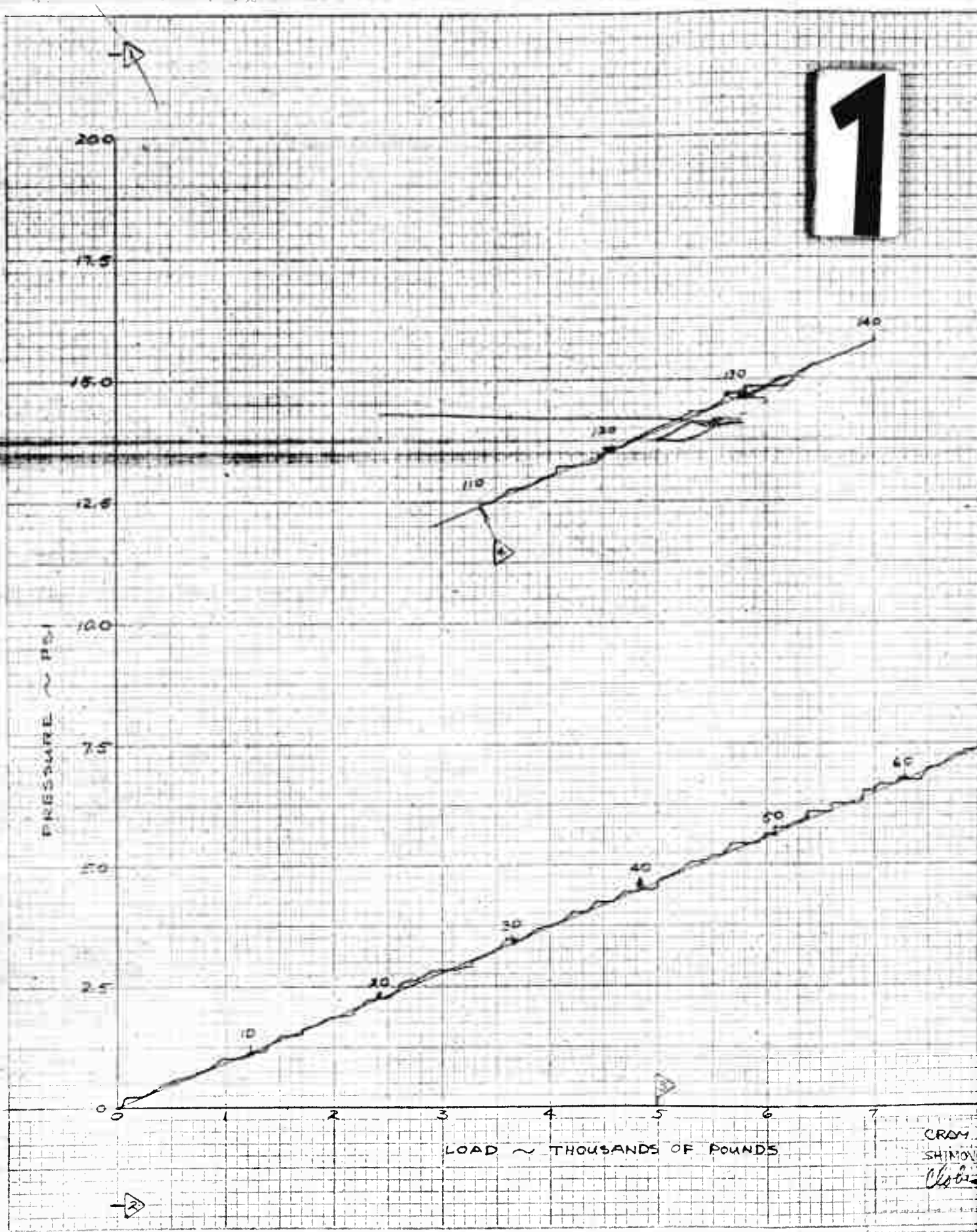


CRAM 5-2862
SHIMON 6-2-32
Clotha 6/5/2

PRESSURE VS. LOAD
DS SHEAR WEB AND PANEL
TEST L-5652-6-3 TEST DATE 5-18-62

EWA
5-652
D2-80081
FIG. 83

1



CHERRY, INC.
ALBUQUERQUE, N.M.
K-10-10

CRAM
SHIMON
Chapman

102

5-23-62

X-Y PLOTTER BAL 168136

2-412- LOAD 15/40 DYN BAR #219

FUNCTION- STRAINOMETER-NORM

BAL SWITCH-50 K

BRIDGE SWITCH-2 ARM

BRIDGE VOLTAGE-20.0 VOLTS

3-412- PRESSURE MPK #2175

FUNCTION-SIMULATOR-NORM

CALIB SENS-995 DIVISIONS

SENS. SET.-871 DIVISIONS

BAL SWITCH-50 K

BRIDGE SWITCH-4 ARM

BRIDGE VOLTAGE-6.0 VOLTS

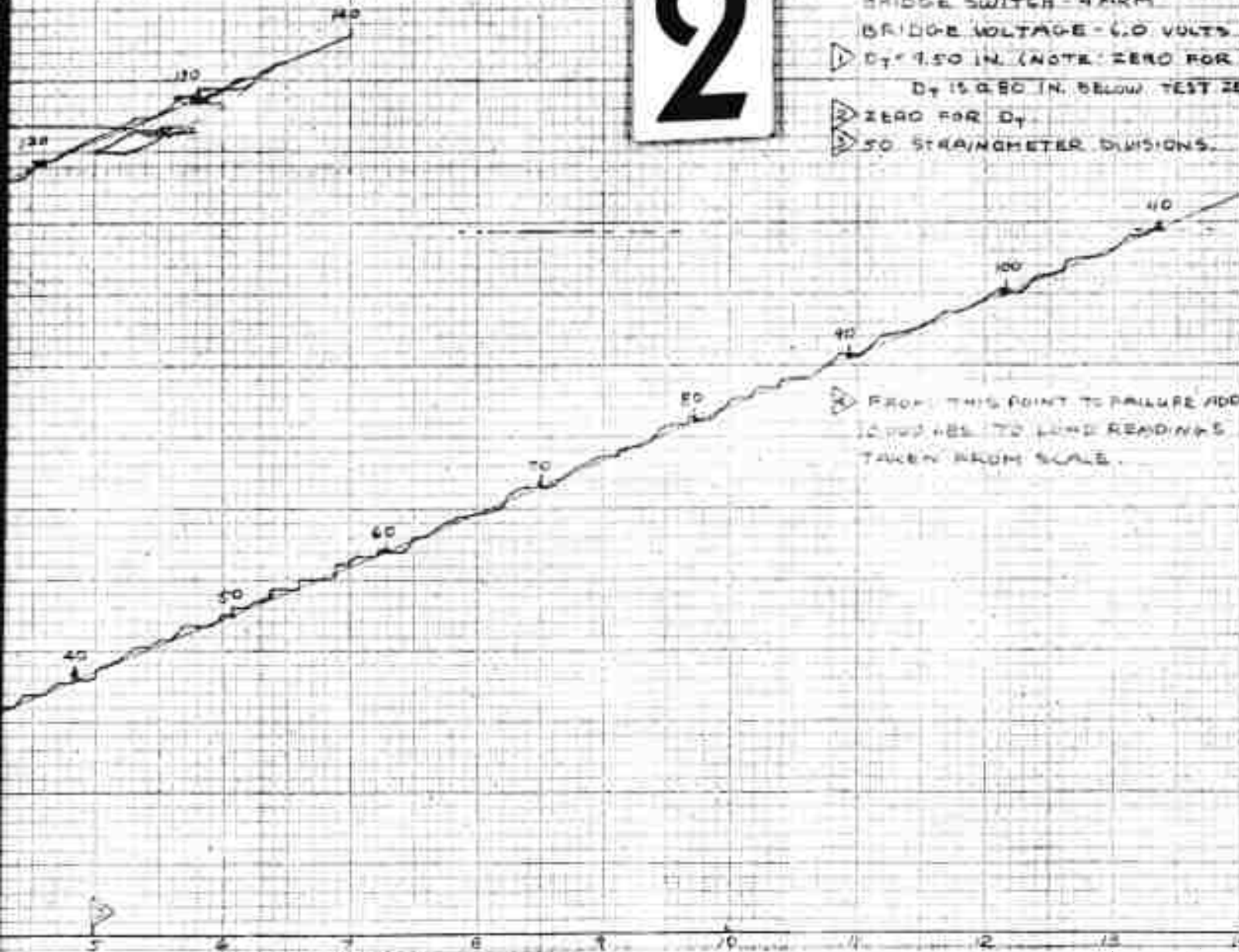
1 D₁ 1.50 IN. (NOTE ZERO FOR

D₁ IS 0.80 IN. BELOW TEST ZERO

2 ZERO FOR D₁

3 50 STRAINOMETER DIVISIONS.

2



FROM THIS POINT TO FAILURE ADD
1000 LBS. TO LOAD READINGS
TAKEN FROM SCALE.

THOUSANDS OF POUNDS

CROM 52962

SHIMON 5-4-62

Chiba 6/5/2

PRESSURE VS. LOAD

DS SHEAR WEB AND PANEL

TEST LT-5652-6-4 TEST DATE 5-2-62

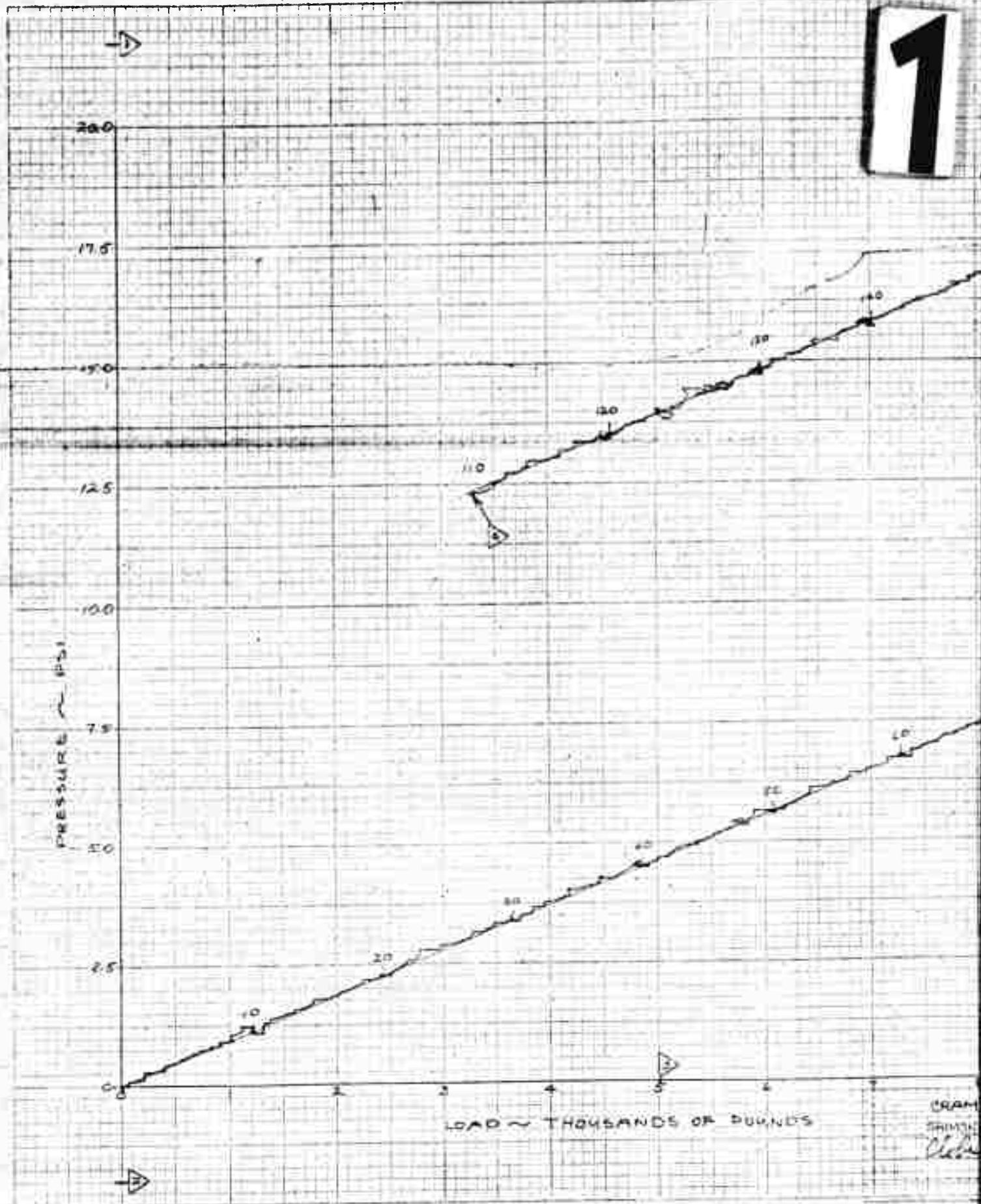
EWA
5-652

02-80081

FIG. 54

1

FLIGHT ENGINEERING, INC.
2000 W. 10TH AVE.
DENVER, CO. 80202



103

5-24-62

CRAM
SHIMSH
Cleb

01.451

X-Y PLOTTER BAC 168136

X-AXIS LOAD 10/40 DYN BAR #219

FUNCTION- STRAINOMETER NORM

BAL. SWITCH- 50 K

BRIDGE SWITCH- 2 ARM

BRIDGE VOLTAGE- 20.0 VOLTS

Y-AXIS PRESSURE PPU # 2175

FUNCTION- SIMULATOR- NORM

CALIB. SENS. - 945 DIVISIONS

SENS. SET. - 87.1 DIVISIONS

BAL. SWITCH- 50 K

BRIDGE SWITCH- 4 ARM

BRIDGE VOLTAGE- 6.0 VOLTS

1 $D_T = 9.49$ IN. (NOTE: ZERO FOR

D_T IS 0.80 IN. BELOW TEST ZERO)

2 ZERO FOR D_T

3 50 STRAINOMETER DIVISIONS.

2

4 FROM THIS POINT TO FAILURE

ADD 10,000 LBS. TO LOAD READING
TAKEN FROM SCALE.

TENSANDS OF POUNDS

CRAM 5-2962

SHIMONO 6-4-62

Clock 6/5/2

PRESSURE VS. LOAD

DS SHEAR WEB AND PANEL

TEST 6-5652-6-5 TEST DATE 5-24-62

EWA

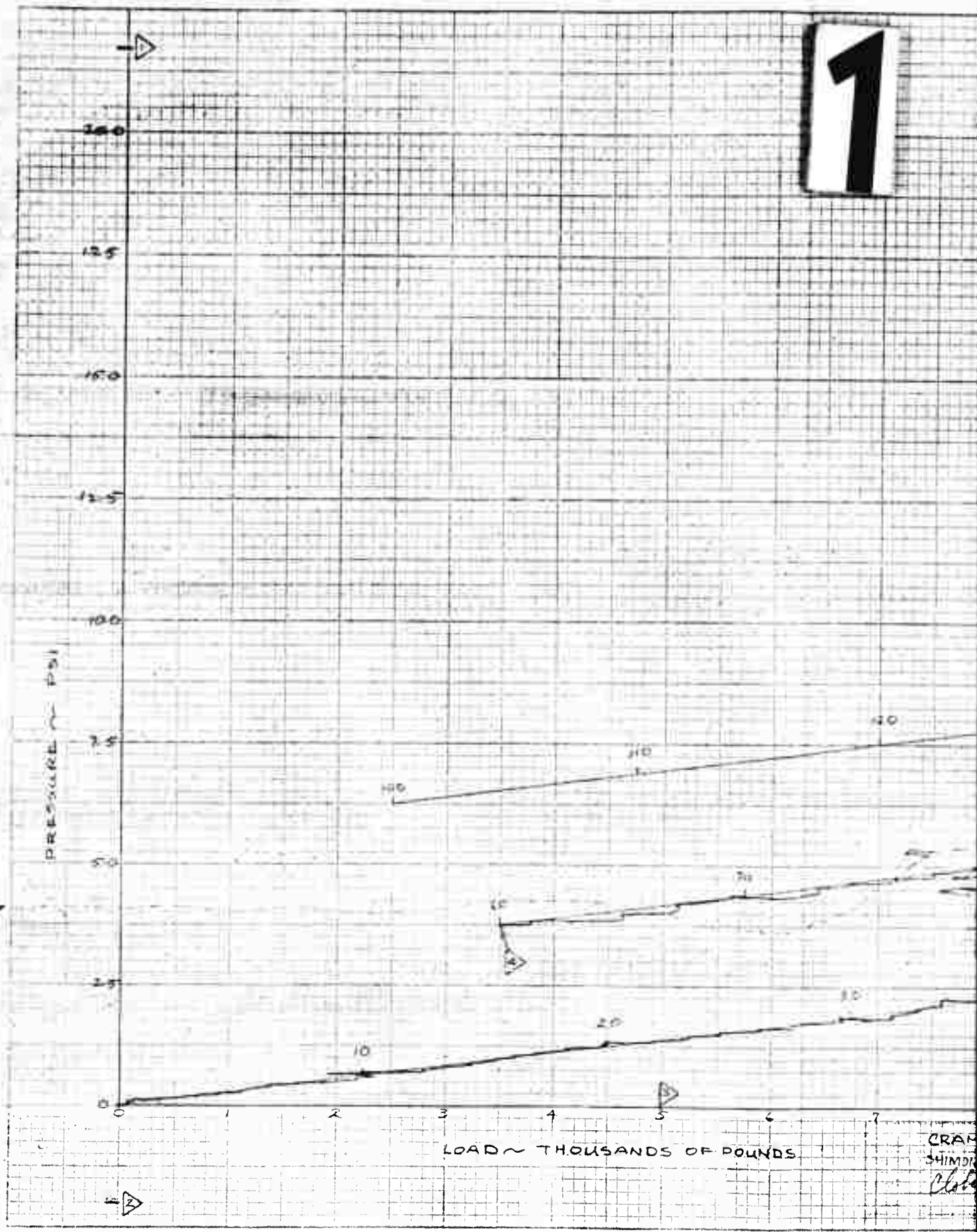
5-652

D2-80081

FIG. 85

RAM
11M017
late

1



104

CRAN
SHIMON
Clob

X-Y PLOTTER BAC 168136

X-AXIS LOAD 10/40 DYN BAR #219

FUNCTION-STRAINOMETER-NORM

BAL SWITCH-50 K

BRIDGE SWITCH-2 ARM

BRIDGE VOLTAGE-20.0 VOLTS

Y-AXIS PRESSURE PRU #2175

FUNCTION-SIMULATOR-NORM

CALIB SENS-945 DIVISIONS

SENS SET-877 DIVISIONS

BAL SWITCH-50 K

BRIDGE SWITCH-4 ARM

BRIDGE VOLTAGE-6.0 VOLTS

1. $D_T = 9.49$ IN (NOTE: ZERO FOR D_T IS 0.80 IN. BELOW TEST ZERO)

2. ZERO FOR D_T

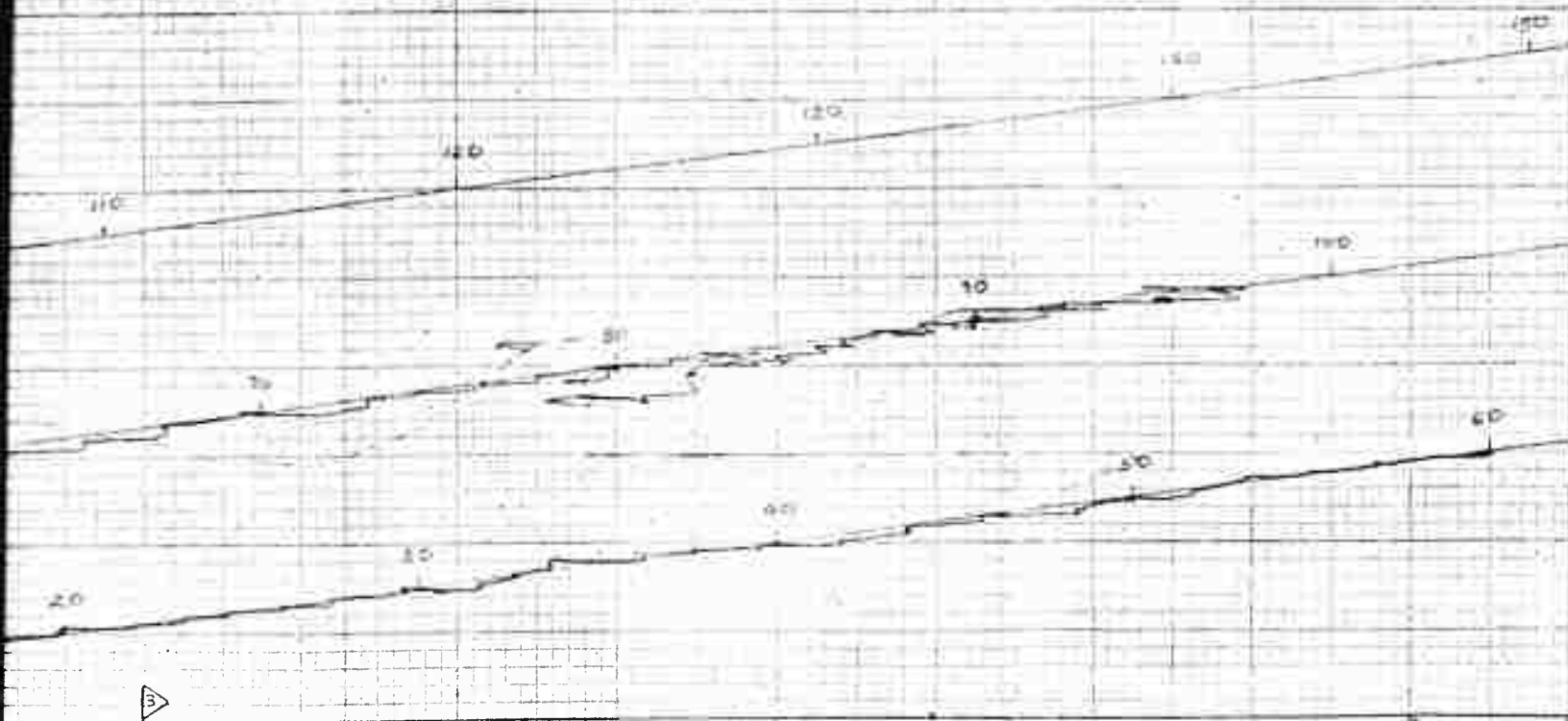
3. 50 STRAINOMETER DIVISIONS

4. FROM THIS POINT TO FAILURE

ADD 10,000 LBS. TO LOAD

READINGS TAKEN FROM SCALE

2



TENS OF THOUSANDS OF POUNDS

GRAM 5-2562

SHIMDIT 6-40

Closter 6/5/2

PRESSURE VS. LOAD

DS SHEAR WEB AND PANEL

TEST L-5652-6-6 TEST DATE 5-25-62

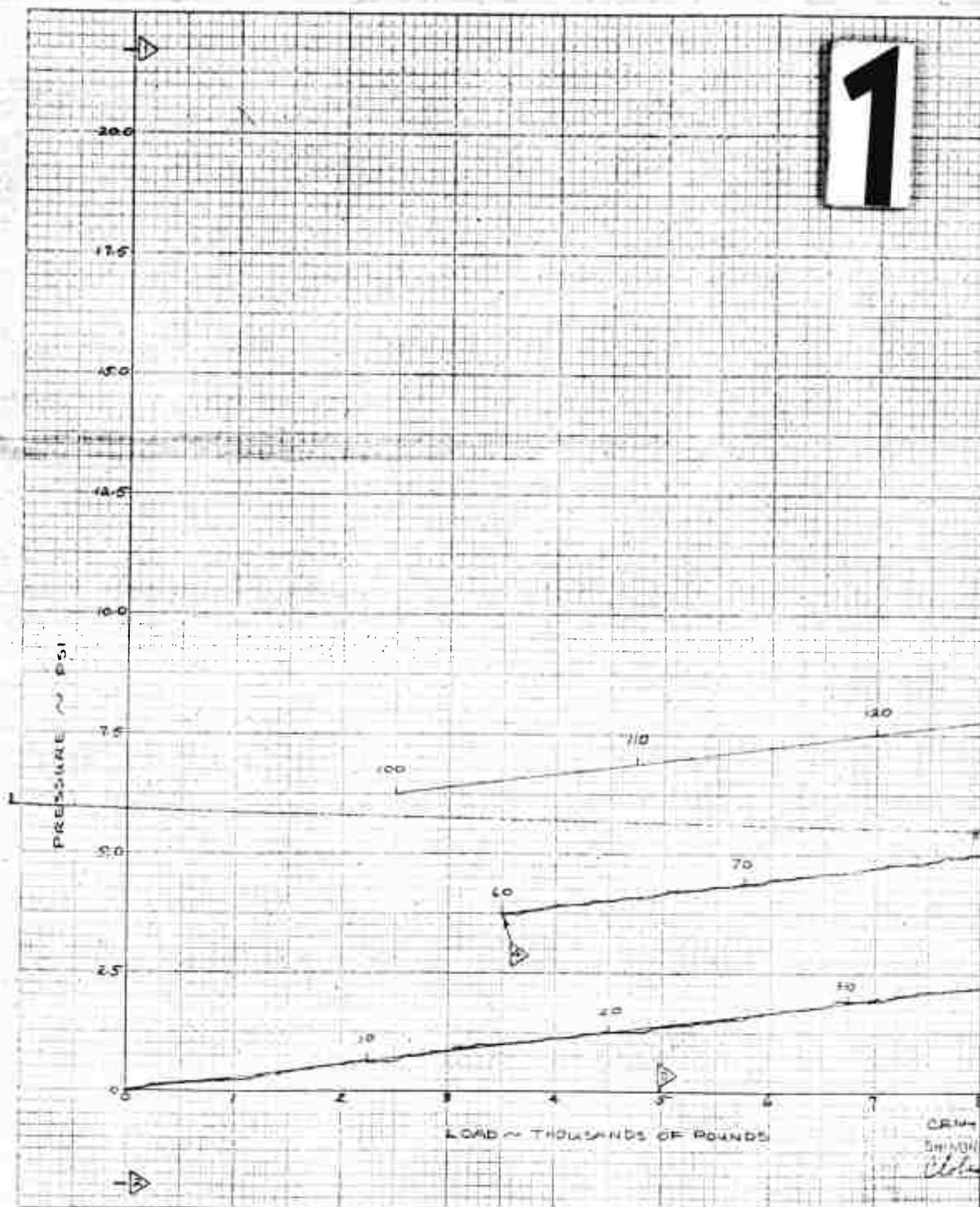
EWA 5-652

D2-80081

FIG. 810

1

RESEARCH INSTRUMENTS, INC.
NEW YORK, N.Y.



105

5-26-52

U.S. GOVERNMENT PRINTING OFFICE

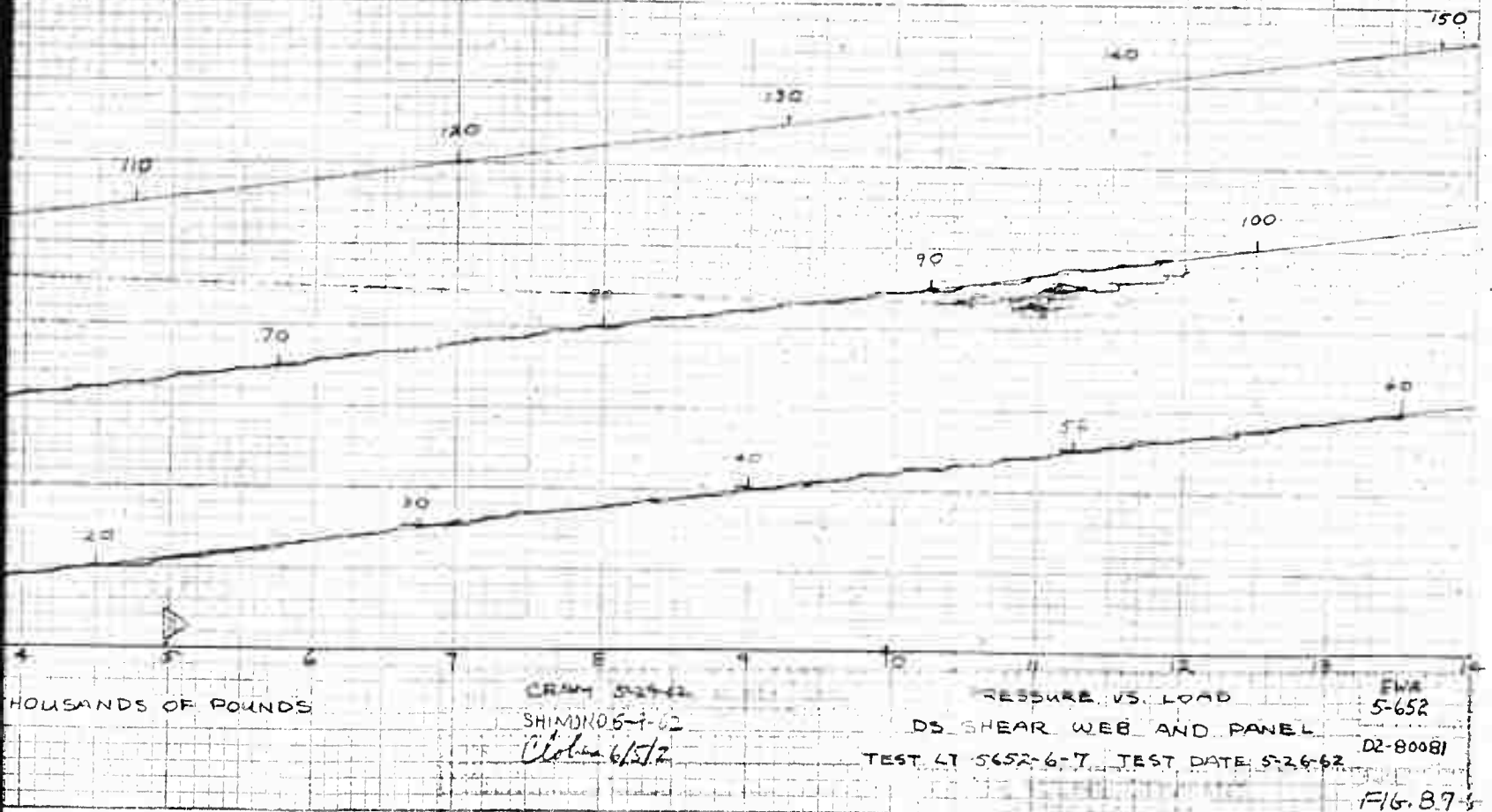
X-Y PLOTTER BAC 168136

X-AXIS LOAD 10/40 DYN BAR #219
FUNCTION STRAINOMETER-NORM.
BAL SWITCH-50 K
BRIDGE SWITCH-2 ARM
BRIDGE VOLTAGE-20.0 VOLTS

Y-AXIS PRESSURE PPU #2175
FUNCTION-SIMULATOR-NORM.
CALIB. SENS.-945 DIVISIONS
SENS. SET.-871 DIVISIONS
BAL SWITCH-50 K
BRIDGE SWITCH-4 ARM
BRIDGE VOLTAGE-6.0 VOLTS
1 $D_T = 9.48$ IN. (NOTE: ZERO FOR D_T
IS 0.80 IN. BELOW TEST ZERO.)

2 ZERO FOR D_T .
3 50 STRAINOMETER DIVISIONS.
4 FROM THIS POINT TO FAILURE ADD
10,000 LBS. TO LOAD READINGS
TAKEN FROM SCALE.

2



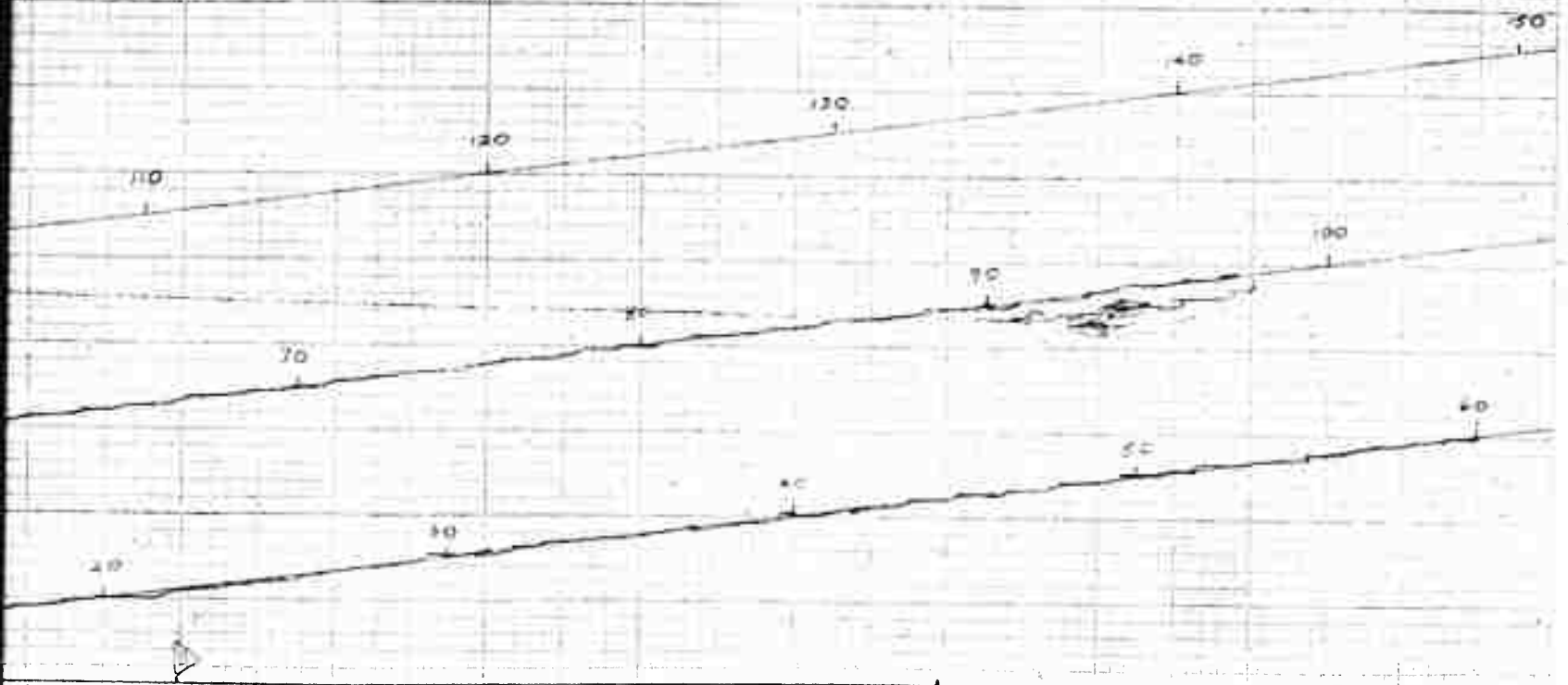
X-Y PLOTTER BAC 16836

X-AXIS LOAD 19/40 DYN. BAR #219
FUNCTION-STRAINOMETER-NORM.
BAL. SWITCH-50 K
BRIDGE SWITCH-2 ARM
BRIDGE VOLTAGE-20.0 VOLTS

Y-AXIS PRESSURE DPH # 2175
FUNCTION-SIMULATOR-NORM.
CALIB. SENS.-945 DIVISIONS
SENS. SET.-871 DIVISIONS
BAL. SWITCH-50 K
BRIDGE SWITCH-4 ARM
BRIDGE VOLTAGE-6.0 VOLTS

- 1 $D_T = 9.48$ IN. (NOTE: ZERO FOR D_T
IS 0.80 IN. BELOW TEST ZERO.)
2 ZERO FOR D_T
3 50 STRAINOMETER DIVISIONS.
4 FROM THIS POINT TO FAILURE ADD
40,000 LBS. TO LOAD READINGS
TAKEN FROM SCALE.

2



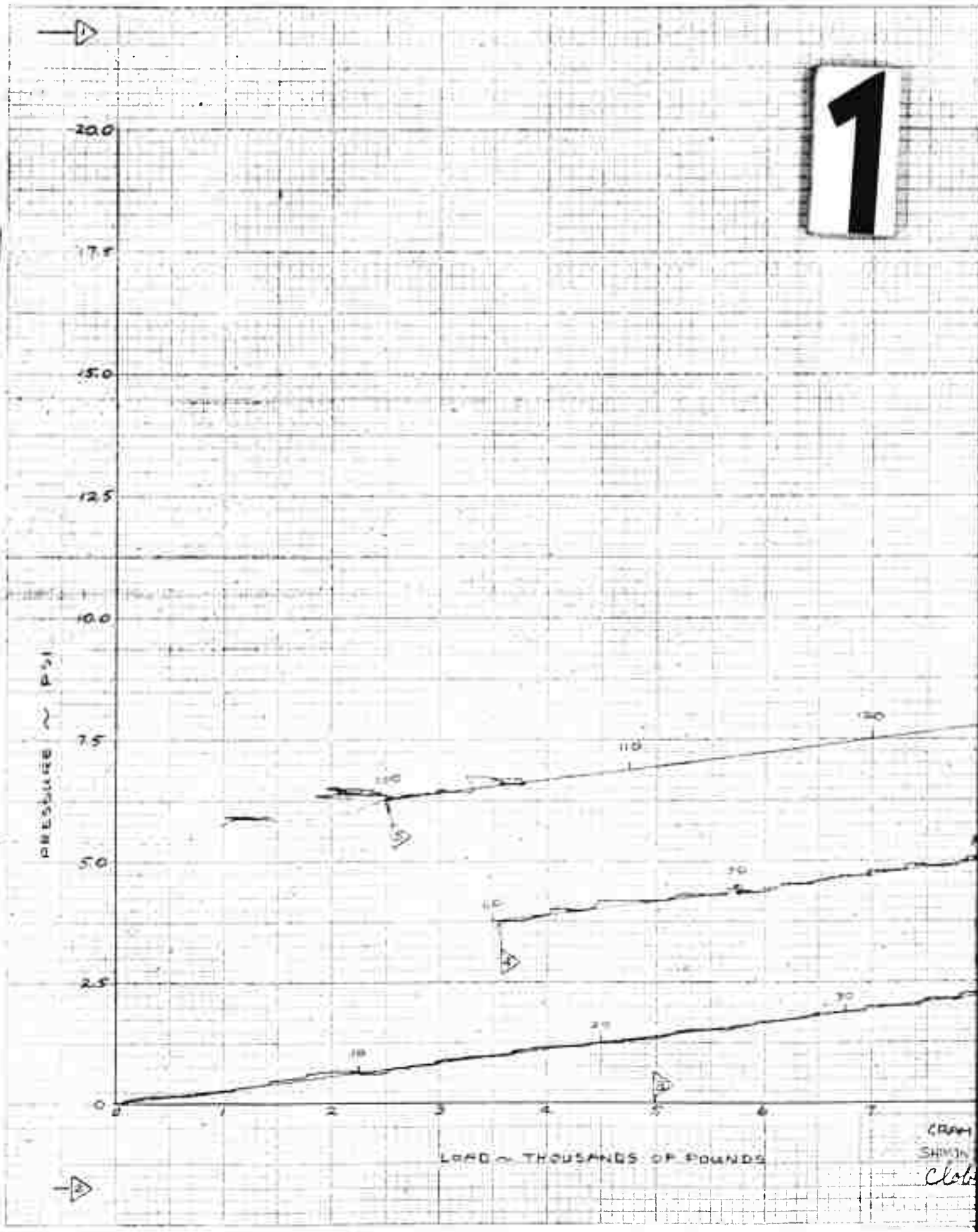
THOUSANDS OF POUNDS

GRAM 5-24-62
SHIMONOS-7-62
Clobin 6/5/72

PRESSURE VS. LOAD
DS SHEAR WEB AND PANEL
TEST LT 5652-6-7 TEST DATE 5-26-62

EWA
5-652
D2-80081
FIG. 8.7

1



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h-24-62

CRAM
SHIMIN
Clob

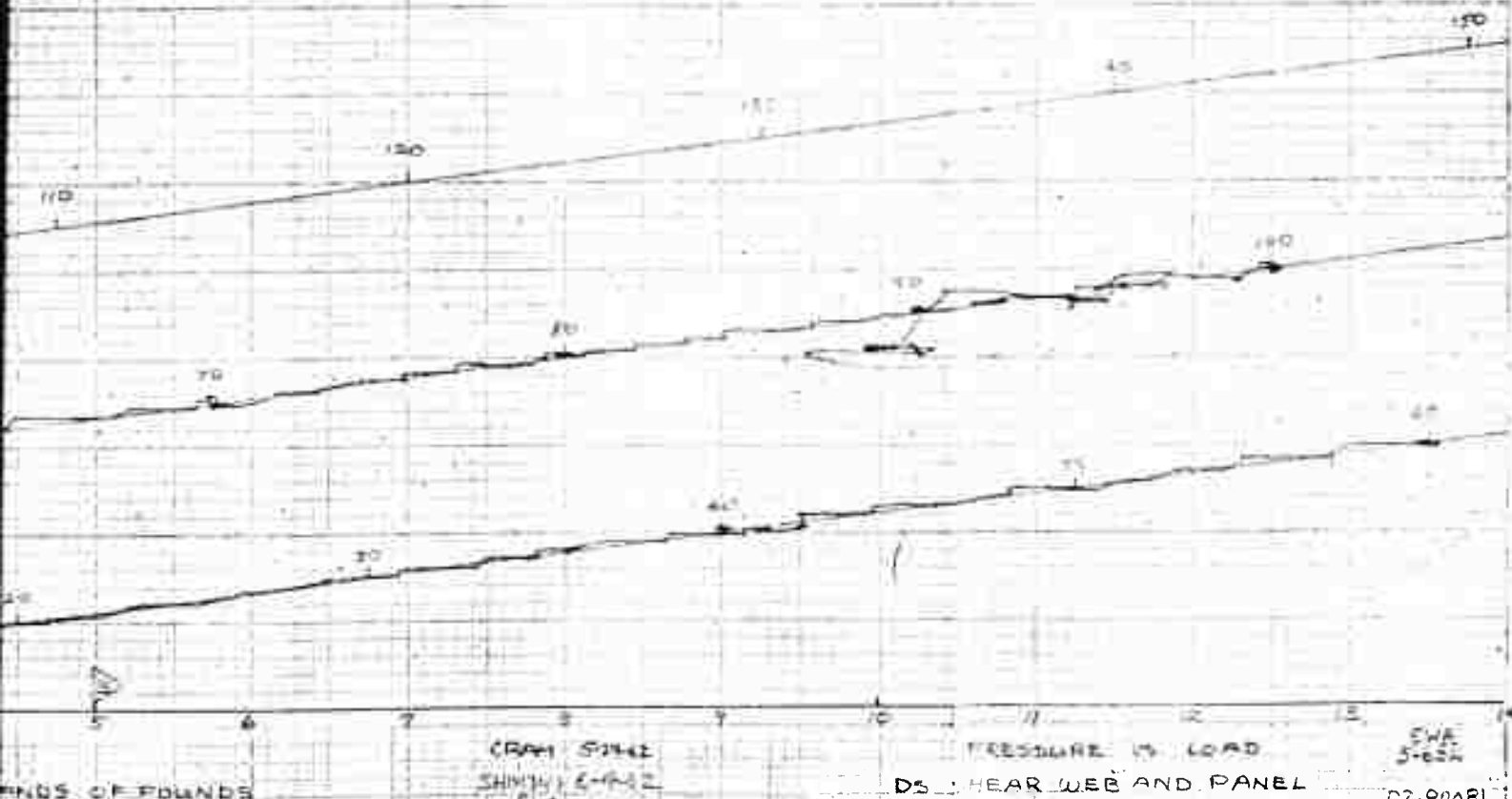
X-Y PLOTTER BAC 168136

X-AXIS LOAD 10/40 DYN BAR #219
 FUNCTION- STRAINOMETER NORM
 BAL. SWITCH-50K
 BRIDGE SWITCH-2 ARM
 BRIDGE VOLTAGE-20.0 VOLTS

Y-AXIS PRESSURE PPU #2175
 FUNCTION- SIMULATOR NORM
 CALIB. SENS. -945 DIVISIONS
 SENS. SET. -877 DIVISIONS
 BAL. SWITCH-50K
 BRIDGE SWITCH-4 ARM
 BRIDGE VOLTAGE-60.0 VOLTS

2

- ▷ DT = 9.49 IN. (NOTE: ZERO FOR DT IS 0.80 IN. BELOW TEST ZERO)
- ▷ ZERO FOR DT.
- ▷ 50 STRAINOMETER DIVISIONS.
- ▷ FROM THIS POINT TO ▷ ADD 10,000 POUNDS TO LOAD READINGS TAKEN FROM SCALE.
- ▷ FROM THIS POINT TO FAILURE ADD 10,000 POUNDS TO LOAD READINGS TAKEN FROM SCALE.



CRAM STATE
 SHIMMY E-412
 Cloin 4/5/2

DS HEAR WEB AND PANEL

TEST LT 5652-6-8 TEST DATE 5-28-62

D2-80081
 FIG. 89

DESIRED LOAD		EDI LOCATION									
%	LBS		D01	D02	D03	D04	D05	D06	D07	D08	
			← DEFLECTION ~					INCHES →			
0	0		0	0	0	0	0	0	0	0	
10	445		.037	.009	.034	0	.002	.002	.006	.005	
20	890		.058								
30	1335		.078								
40	1780		.096	.033	.086	.008	.011	.009	.014	.028	
50	2225		.114	.042	.103	.011	.014	.013	.018	.036	
60	2670		.133	.051	.122	.015	.017	.018	.020	.044	
70	3115		.151	.060	.138	.019	.020	.023	.023	.053	
80	3560		.170	.070	.158	.024	.023	.028	.026	.062	
90	4005		.189	.079	.175	.028	.026	.033	.029	.070	
100	4450		.208	.088	.193	.032	.028	.038	.030	.079	
110	4895		.226	.098	.211	.036	.032	.044	.033	.087	
120	5340		.244	.108	.229	.041	.034	.049	.035	.097	
130	5785		.263	.117	.247	.046	.038	.055	.038	.105	
140	6230	✓	.283	.127	.266	.050	.040	.060	.040	.113	
150	6675		.382	.137	.366	.057	.044	.073	.043	.122	
160	7120		.567	.143	.557	.087	.051	.113	.044	.131	
0	0		.158	.005	.169	.008	.004	.018	.001	.010	

FOR EDI CLIP LOCATIONS SEE FIG. 13.

FOR DATA SEE FIG. 14.

REV. 1, 31-1

CALC	Baird 4/1/62	REVISED	DATE	EDI DEFLECTION DS SHEAR WEB AND PANEL		EWA 5-652
CHECK	PC Foster 6/11/62			TEST LT 5652-1-1		02-80081
APR	SHIMONO 6/12/62			THE BOEING COMPANY		PAGE
APR	Choban 6/12/62			SEATTLE 24, WASHINGTON		FIG. 89

DESIRED LOAD		EDI LOCATION								
%	LBS.		D01	D02	D03	D04	D05	D06	D07	D08
			← DEFLECTION ~ INCHES →							
0	0		0	0	0	0	0	0	0	0
10	445		.031	.010	.024	.002	0	.001	.006	.008
20	890		.049							
30	1335		.067							
40	1780		.086							
50	2225		.104	.041	.090	.015	.011	.016	.014	.041
60	2670		.124							
70	3115		.145	.056	.128	.019	.017	.022	.018	.056
80	3560		.167							
90	4005		.191	.072	.171	.021	.022	.026	.022	.071
100	4450		.213	.080	.191	.023	.024	.028	.024	.079
110	4895		.230	.088	.207	.026	.027	.032	.026	.087
120	5340		.250	.097	.226	.030	.029	.037	.029	.094
130	5785		.268	.106	.243	.034	.032	.041	.030	.102
140	6230		.286	.115	.259	.038	.034	.045	.034	.110
150	6675	✓	.309	.124	.281	.043	.037	.050	.036	.118
160	7120		.404	.132	.376	.052	.039	.062	.038	.125
170	7565		.615	.139	.586	.088	.039	.103	.042	.135
180	8010		.772	.144	.751	.123	.039	.139	.044	.142
0	0		.238	.013	.246	.009	.002	.020	.005	0
FOR CLIP LOCATIONS SEE FIG. 13.										

CALC	BAIDA	6/12/62	REVISED	DATE	EDI DEFLECTION DS SHEAR WEB AND PANEL TEST LT 5652-1-2 THE BOEING COMPANY SEATTLE 24, WASHINGTON	EWA 5-652
CHECK	EIBSON	6/12/62				
APR	SHIMONO	6/14/62				02-80081
APR	Chobee	6/14/62				PAGE FIG. 90

[illegible]

[illegible]

CALC	BAIDA	6/6/62	REVISED	DATE	EDI DEFLECTION DS SHEAR WEB AND PANEL	EWA 5-652
CHECK	E. GIBSON	6/6/62			TEST LT 5652-6-3	02-80081
APR	SHIMOND	6/12/62				
APR	clober	6/13/62			THE BOEING COMPANY SEATTLE 24, WASHINGTON	PAGE FIG. 95

DESIRED LOAD		EDI LOCATION								
%	KIPS	D01	D02	D03	D04	D05	D06	D07	D08	
		← DEFLECTION ~ INCHES →								
0	0	0	0	0	0	0	0	0	0	
10	1.22	.008	.028	.029	.017	.005	.010	.015	.010	
20	2.43		.048	.049	.030	.009	.025			
30	3.64		.069							
40	4.86	.017	.098	.099	.050	.033	.058	.080	.057	
50	6.01	.019	.131	.132	.063	.047	.077	.110	.078	
60	7.29	.022	.161	.162	.074	.057	.102	.141	.097	
70	8.51	.025	.184	.186	.083	.062	.122	.173	.124	
80	9.72	.029	.207	.209	.094	.067	.141	.203	.147	
90	10.94	.033	.230	.231	.103	.070	.161	.235	.169	
100	12.15	✓	.251	.253	.113	.074	.181	.264	.195	
110	13.37		.353	.357	.122	.062	.300	.635	.332	
120	14.58		.399	.407	.131	.059	.374	.760	.390	
130	15.80		.513	.528	.143	.044	.496	OFF SCALE	.529	
140	17.01		.556	.579	.152	.039	.542		.576	
150	18.23		.617	.658	.162	.035	.593	Y	.626	
156	18.95		.723	SPECIMEN FAILED						
0	0									
FOR EDI CLIP LOCATIONS SEE FIGS. 17										
FIG. 18										

CALC	BAIDA	6/6/62	REVISED	DATE	EDI DEFLECTION DS SHEAR WEB AND PANEL TEST LT-5652-6-5	EWA
CHECK	E. IBSON	6/6/62				5-652
APR	SHIMONO	6/12/62				D2-80081
APR	Choke	6/13/62				PAGE FIG. 97
					THE BOEING COMPANY SEATTLE 24, WASHINGTON	

[illegible]

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STRAIN
ROSETTE TABULATIONS

ROSETTE NOS. 1 to 10 (See Fig. 19 for locations)

LOAD ~ %

TEMPERATURE ~ ROOM TEMPERATURE

EA }
EB } Strain for respective gage elements A, B, & C
EC } in 100's of Micro-Inches/Inch.

TX-E -- Maximum shear strain in 100's of Micro-Inches/Inch.

EX -- Maximum principal strain in 100's of Micro-Inches/Inch.

EN -- Minimum principal strain in 100's of Micro-Inches/Inch.

TH -- Theta is an angle between EX and gage B ~ degrees.
Negative in gage A direction.

Note: Each Rosette Gage must be located on specimen to read clockwise for gages A, B, & C in rectangular pattern.

Signs: Negative sign means Compression except for TX which shows no sign and TC which negative means a counter-clockwise shear couple, termed left couple.

CALC	Strickland 7/17	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC NO. 0102 COND NO. 01 RUN 01 BOEING AIRPLANE COMPANY	EWA 5-652
CHECK					
APPD					02-80081
APPD					PAGE FIG. 101

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116-9311

X-4933

STRAIN

ROSETTE NO. 1

% LOAD	Room TEMP	B-C		B-C		100's $\mu\text{IN}/\text{IN}$		ϵ°	
		B-C 1-1	B-C 2-1	EA	EB	EC	TX-E	EX	EN
0.00	0	-0.	-0.	-0.	-0.	-0.	0.	-0.	TH -0.0
10.00	0	-0.	1.638	0.386	1.638	0.386	1.46	1.65	-1.27
50.00	0	0.578	9.156	1.831	9.156	1.831	7.98	9.18	-6.77
70.00	0	1.446	13.300	2.699	13.300	2.699	11.25	13.32	-9.17
90.00	0	2.891	18.023	3.470	18.023	3.470	14.85	18.03	-11.66
100.00	0	3.759	20.433	3.855	20.433	3.855	16.63	20.43	-12.82
110.00	0	4.723	22.746	4.241	22.746	4.241	18.27	22.75	-13.78
120.00	0	6.072	25.541	4.530	25.541	4.530	20.25	25.56	-14.95
130.00	0	8.000	28.528	5.012	28.528	5.012	22.07	28.58	-15.57
140.00	0	11.084	32.191	6.168	32.191	6.168	23.69	32.32	-15.07
150.00	0	11.276	33.637	6.361	33.637	6.361	24.94	33.76	-16.12
160.00	0	10.024	17.348	-1.446	17.348	-1.446	14.26	18.55	-9.97
170.00	0	12.915	6.554	-7.228	6.554	-7.228	10.73	13.58	-7.89
180.00	0	18.505	6.747	-7.132	6.747	-7.132	12.86	18.55	-7.18
.00	0	3.084	-8.771	-5.879	-8.771	-5.879	8.63	7.23	-10.03

CALC	ALC	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC NO. 0102 COND NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	06-06-2				5-652
APR	SHIMONO	7/13/52			D2-80081
APR	ALC	7/13/52			PAGE
CONTRACT NO.				FIG. 102	

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116-911

X-4933

STRAIN

ROSETTE NO. 2

LOAD	ROOM TEMP	B-C	B-C 4-1	B-C 5-1	B-C 6-1	EA	EB	EC	TX-E	EX	EN	TH
100.00	0					-0.	-0.	-0.	0.	-0.	-0.	-0.0
110.00	0					-0.	1.542	-0.	1.54	1.54	-1.54	-0.0
120.00	0					-0.578	7.614	0.386	7.73	7.63	-7.82	1.8
130.00	0					-0.675	10.795	0.482	10.91	10.81	-11.00	1.5
140.00	0					-0.482	14.457	0.675	14.37	14.47	-14.28	1.2
150.00	0					-0.386	16.288	0.867	16.06	16.30	-15.82	1.1
160.00	0					-0.	17.927	0.964	17.45	17.93	-16.97	0.8
170.00	0					0.386	20.143	1.253	19.33	20.15	-18.51	0.6
180.00	0					1.060	22.264	1.542	20.96	22.27	-19.66	0.3
190.00	0					2.699	24.866	2.313	22.36	24.87	-19.86	-0.2
200.00	0					-1.831	35.082	11.180	31.10	35.77	-26.42	6.0
210.00	0					-32.576	10.602	19.372	31.16	24.55	-37.76	28.2
220.00	0					-70.839	13.108	8.096	59.47	28.09	-90.84	20.8
230.00	0					-9999.999	-9999.999	-9999.999				
240.00	0					-0.578	-9999.999	8.771				

CALC	Stip	7/2/72	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL	EWA
CHECK	06706-2				EWA NO. 05652	5-652
APR	SHIMONO	7/13/72			SPEC NO. 0102	
APR	Choten	7/13/72			COND NO. 01	02-80081
					THE BOEING COMPANY	
CONTRACT NO.					PAGE	FIG. 103

STRAIN

ROSETTE NO. 3

% LOAD	Room TEMP	100's $\mu\text{IN}/\text{IN}$				ϵ°					
		B-C 7-1	B-C 8-1	B-C 1-2	EA	EB	EC	TX-E	EX	EN	TH
0.00	0	-0.	-0.	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.0
10.00	0	-0.	1.735	-0.	-0.	1.735	-0.	1.73	1.73	-1.73	-0.0
50.00	0	-0.096	8.674	-0.675	-0.096	8.674	-0.675	9.06	8.68	-9.45	-0.9
70.00	0	-0.578	11.758	-1.157	-0.578	11.758	-1.157	12.63	11.76	-13.50	-0.7
90.00	0	-1.446	15.035	-1.638	-1.446	15.035	-1.638	16.58	15.04	-18.12	-0.2
100.00	0	-2.024	16.577	-2.024	-2.024	16.577	-2.024	18.60	16.58	-20.63	-0.0
110.00	0	-2.795	17.927	-2.313	-2.795	17.927	-2.313	20.48	17.93	-23.04	0.3
120.00	0	-3.855	19.469	-2.699	-3.855	19.469	-2.699	22.75	19.48	-26.03	0.7
130.00	0	-5.205	20.818	-3.084	-5.205	20.818	-3.084	24.98	20.84	-29.13	1.2
140.00	0	-7.325	21.685	-4.144	-7.325	21.685	-4.144	27.47	21.73	-33.20	1.7
150.00	0	-8.192	22.360	1.253	-8.192	22.360	1.253	26.26	22.79	-29.73	5.2
160.00	0	17.734	18.216	8.481	17.734	18.216	8.481	6.89	20.00	6.22	-21.1
170.00	0	41.443	17.734	-14.843	41.443	17.734	-14.843	28.49	41.79	-15.19	-40.5
180.00	0	9999.999	9999.999	-13.204	9999.999	9999.999	-13.204				
9.349	0	9.349	-0.482	1.253	9.349	-0.482	1.253	7.06	12.36	-1.76	-72.5

CALC	Atty	7/12/62	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND NO. 01 SPEC NO. 0102 JUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	06-06-2					
APR	SHIMONO	7/13/62				
APR	Charles	7/13/62				
CONTRACT NO.						PAGE FIG. 104

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2-5211

X-4933

STRAIN

ROSETTE NO. 4

LOAD	ROOM TEMP	B-C	B-C		B-C		100's OF		KIN/IN		L	
			2-2	3-2	4-2	EA	EB	EC	TX-E	EX	EN	TH
0.00	0		-0.386	-0.446	-0.482	-0.386	-0.446	-0.482	0.46	-0.46	-0.46	-0.0
10.00	0		-0.386	1.446	0.482	-0.386	1.446	0.482	1.46	1.51	-1.42	8.6
50.00	0		-0.964	7.421	3.470	-0.964	7.421	3.470	6.55	7.81	-5.30	9.9
70.00	0		-0.964	10.698	5.205	-0.964	10.698	5.205	9.12	11.24	-7.00	9.9
90.00	0		-0.771	14.361	6.843	-0.771	14.361	6.843	11.95	14.98	-8.91	9.3
100.00	0		-0.578	16.192	7.518	-0.578	16.192	7.518	13.35	16.82	-9.88	8.8
110.00	0		-0.386	17.734	8.000	-0.386	17.734	8.000	14.54	18.35	-10.74	8.4
120.00	0		-0.386	19.662	8.578	-0.386	19.662	8.578	15.96	20.25	-11.67	7.8
130.00	0		0.386	21.589	9.060	0.386	21.589	9.060	17.42	22.14	-12.69	7.2
140.00	0		0.964	23.420	9.445	0.964	23.420	9.445	18.70	23.91	-13.50	6.6
150.00	0		2.313	25.926	9.542	2.313	25.926	9.542	20.32	26.25	-14.40	5.1
160.00	0		-4.819	10.024	-2.891	-4.819	10.024	-2.891	13.91	10.06	-17.77	2.0
170.00	0		-16.770	-14.939	-9.638	-16.770	-14.939	-9.638	3.97	-9.24	-17.17	58.0
180.00	0		-24.673	-23.131	-6.939	-24.673	-23.131	-6.939	11.50	-4.31	-27.31	64.8
0.00	0		-25.155	-27.468	-2.024	-25.155	-27.468	-2.024	18.07	4.48	-31.66	70.1

CALC	Shoop	7/10/72	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL	EWA
CHECK	06-06-2				EWA NO. 05652	5-652
APR	SHIMON	7/13/72			SPEC NO. 0102	
APR	Chase	7/13/72			COND NO. 01	D2-80081
					JUN 01	
					THE BOEING COMPANY	
						PAGE
						FIG. 105

hcl

2-5311

X-4933

STRAIN

ROSETTE NO. 5

LOAD	Room TEMP	B-C				100'S OF <i>in/in</i>				TH	
		B-C 5-2	B-C 6-2	B-C 7-2		EA	EB	EC	TX-E		EX
00	0	-0.386	-0.964	-0.964	-0.964	-0.386	0.964	-0.964	0.117	-0.98	-0.37
10.00	0	-0.386	0.964	-0.964	-0.964	-0.386	0.964	-0.964	1.117	0.98	-1.37
50.00	0	-1.638	5.397	0.386	0.386	0.386	5.397	0.386	6.11	5.48	-6.73
70.00	0	-2.409	7.325	0.578	0.578	0.578	7.325	0.578	8.37	7.46	-9.29
90.00	0	-2.988	9.638	0.964	0.964	0.964	9.638	0.964	10.83	9.82	-11.84
100.00	0	-3.373	10.698	1.060	1.060	1.060	10.698	1.060	12.06	10.90	-13.22
110.00	0	-3.662	11.951	1.349	1.349	1.349	11.951	1.349	13.35	12.19	-14.50
120.00	0	-3.855	13.011	1.542	1.542	1.542	13.011	1.542	14.42	13.27	-15.58
130.00	0	-4.048	14.457	1.831	1.831	1.831	14.457	1.831	15.84	14.73	-16.95
140.00	0	-4.337	15.614	2.120	2.120	2.120	15.614	2.120	17.03	15.92	-18.14
150.00	0	-4.337	17.348	2.313	2.313	2.313	17.348	2.313	18.66	17.65	-19.67
160.00	0	-19.854	11.373	11.662	11.662	11.662	11.373	11.662	22.08	17.99	-26.18
170.00	0	-13.108	9.156	3.277	3.277	3.277	9.156	3.277	16.28	11.37	-21.20
180.00	0	-15.999	7.807	-2.120	-2.120	-2.120	7.807	-2.120	18.24	9.18	-27.30
00	0	15.132	13.493	2.120	2.120	2.120	13.493	2.120	8.12	16.75	0.50

CALC	8/25/62	7/10/62	REVISED	DATE	EWA
CHECK	06-06-2				5-652
APR	SHIMONO	7/13/62			
APR	Chobee	7/13/62			
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND NO. 01 SPEC NO. 0102 JUN 01					D2-8008
THE BOEING COMPANY					PAGE
CONTRACT NO.					FIG. 106

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X-4933

STRAIN

ROSETTE NO. 6

% LOAD	ROOM TEMP	100'S OF				IN/IN				L°	
		B-C 8-2	B-C 1-3	B-C 2-3	EA	EB	EC	TX-E	EX	EN	TH
0.00	0	-0.	-0.	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.0
10.00	0	0.578	1.446	-0.482	0.578	1.446	-0.482	1.49	1.54	-1.45	-10.4
50.00	0	3.759	7.518	-1.831	3.759	7.518	-1.831	7.12	8.09	-6.16	-11.5
70.00	0	5.012	10.216	-2.699	5.012	10.216	-2.699	9.85	11.00	-8.69	-11.5
90.00	0	6.168	13.397	-3.470	6.168	13.397	-3.470	12.98	14.32	-11.63	-10.9
100.00	0	6.554	14.843	-3.855	6.554	14.843	-3.855	14.46	15.81	-13.11	-10.5
110.00	0	6.747	16.385	-3.855	6.747	16.385	-3.855	15.85	17.30	-14.41	-9.8
120.00	0	6.843	17.734	-3.952	6.843	17.734	-3.952	17.16	18.60	-15.71	-9.2
130.00	0	6.843	19.276	-4.241	6.843	19.276	-4.241	18.81	20.11	-17.51	-8.6
140.00	0	6.747	20.625	-4.433	6.747	20.625	-4.433	20.26	21.41	-19.10	-8.0
150.00	0	6.072	22.071	-5.301	6.072	22.071	-5.301	22.42	22.80	-22.03	-7.3
160.00	0	34.793	23.999	-2.313	34.793	23.999	-2.313	20.11	36.35	-3.87	-33.7
170.00	0	42.504	18.601	-11.662	42.504	18.601	-11.662	27.27	42.69	-11.85	-41.7
180.00	0	48.190	29.974	1.638	48.190	29.974	1.638	23.82	48.73	1.09	-38.9
.00	0	12.626	-3.373	2.891	12.626	-3.373	2.891	12.15	19.91	-4.39	-78.2

CALC	8/14/62	7/10/62	REVISED	DATE	EWA
CHECK	06-06-2				5-652
APR	SHIMONO	7/13/62			
APR	Chabe	7/13/62			
TITLE-CORRUGATED SHEAR WEB PANEL					
EWA NO. 05652					
COND. NO. 01					
SPEC NO. 0102					
THE BOEING COMPANY					
CONTRACT NO.					
PAGE					
FIG. 107					

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X-4938

STRAIN

ROSETTE NO. 7

LOAD	B-C	B-C 3-3	B-C 4-3	B-C 5-3	100's OF	EA	EB	EC	TX-E	EX	EN	TH
90	Room				100's OF							
LOAD	TEMP				100's OF							
0.00	0	-0.	-0.	-0.	100's OF	-0.	-0.	-0.	0.61	-0.	-0.	-0.0
10.00	0	-0.	0.386	-0.386	100's OF	0.386	0.386	0.386	0.61	0.42	-0.	-0.2
50.00	0	0.578	2.313	-1.831	100's OF	0.578	2.313	-1.831	3.18	2.55	-3.80	-9.1
70.00	0	0.964	3.373	-2.699	100's OF	0.964	3.373	-2.699	4.62	3.75	-5.49	-11.1
90.00	0	1.157	4.241	-3.277	100's OF	1.157	4.241	-3.277	5.75	4.69	-6.81	-11.7
100.00	0	1.253	4.723	-3.566	100's OF	1.253	4.723	-3.566	6.35	5.20	-7.51	-11.3
110.00	0	1.349	5.205	-3.855	100's OF	1.349	5.205	-3.855	6.96	5.71	-8.22	-11.1
120.00	0	1.349	5.783	-3.855	100's OF	1.349	5.783	-3.855	7.50	6.25	-8.75	-11.0
130.00	0	1.446	5.301	-4.048	100's OF	1.446	5.301	-4.048	7.15	5.85	-8.45	-10.1
140.00	0	1.446	6.747	-4.241	100's OF	1.446	6.747	-4.241	8.63	7.23	-10.02	-11.3
150.00	0	1.542	7.614	-4.433	100's OF	1.542	7.614	-4.433	9.54	8.09	-10.99	-9.6
160.00	0	7.036	19.469	-8.578	100's OF	7.036	19.469	-8.578	21.69	20.92	-22.46	-9.1
170.00	0	26.986	24.962	-6.168	100's OF	26.986	24.962	-6.168	22.06	32.47	-11.65	-10.5
180.00	0	31.998	27.950	-9.734	100's OF	31.998	27.950	-9.734	26.80	37.93	-15.67	-24.4
0.00	0	11.180	6.650	1.157	100's OF	11.180	6.650	1.157	5.03	11.20	1.13	-25.6
												-42.3

CALC	8/5/62	7/12/72	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC NO. 0102 COND NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	06-06-2					5-652
APR	SHIMONO	7/13/62				D2-80081
APR	Chotea	7/13/72				PAGE
CONTRACT NO.						FIG. 108

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K-4933

STRAIN

ROSETTE NO. 8

LOAD	B-C	B-C 6-3	B-C 7-3	B-C 8-3	Room TEMP	EA	EB	EC	TX-E	EX	EN	TH
0.00	0	-0.0	-0.0	-0.0	0	-0.0	-0.0	-0.0	0.0	-0.0	-0.0	-0.0
10.00	0	-0.0	0.289	-0.386	0	-0.0	0.289	-0.386	0.52	0.33	-0.71	-10.9
50.00	0	0.386	1.638	-1.446	0	0.386	1.638	-1.446	2.35	1.82	-2.88	-11.4
70.00	0	0.578	2.409	-2.024	0	0.578	2.409	-2.024	3.39	2.67	-4.11	-11.3
90.00	0	0.867	3.084	-2.506	0	0.867	3.084	-2.506	4.25	3.43	-5.07	-11.7
100.00	0	0.964	3.470	-2.891	0	0.964	3.470	-2.891	4.83	3.87	-5.80	-11.7
110.00	0	1.060	3.759	-3.181	0	1.060	3.759	-3.181	5.26	4.20	-6.33	-11.9
120.00	0	1.157	4.048	-3.373	0	1.157	4.048	-3.373	5.63	4.52	-6.74	-11.9
130.00	0	1.157	4.337	-3.662	0	1.157	4.337	-3.662	6.09	4.83	-7.34	-11.7
140.00	0	1.253	4.819	-3.855	0	1.253	4.819	-3.855	6.63	5.33	-7.93	-11.3
150.00	0	1.349	5.205	-4.241	0	1.349	5.205	-4.241	7.21	5.77	-8.66	-11.4
160.00	0	6.265	11.662	-8.867	0	6.265	11.662	-8.867	15.01	13.71	-16.31	-15.1
170.00	0	-27.179	4.241	2.891	0	-27.179	4.241	2.891	22.24	10.09	-34.38	21.3
180.00	0	-44.142	-3.470	3.373	0	-44.142	-3.470	3.373	29.16	8.78	-49.55	27.3
.00	0	-17.348	4.626	10.987	0	-17.348	4.626	10.987	16.18	13.00	-19.36	30.6

OF *kin/in*

Lo

CALC	06-06-2	7/6/62	REVISED	DATE	EWA
CHECK	SHIMONO	7/13/62			5-652
APR	Chote	7/13/62			02-80081
APR					PAGE
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND NO. 01 SPEC NO. 0102 JUN 01 THE BOEING COMPANY					FIG. 109

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X-4933

STRAIN

ROSETTE NO. 9

LOAD	ROOM TEMP	100's OF $\mu\text{IN/IN}$				$\mu\text{IN/IN}$			TH
		B-C 1-4	B-C 2-4	B-C 3-4	EC	TX-E	EX	EN	
0.00	0	EA	EB		EC	TX-E	EX	EN	TH
10.00	0	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.0
50.00	0	-0.	0.386	-0.289	-0.289	0.55	0.40	-0.69	-7.6
70.00	0	-0.	2.313	-0.482	-0.482	2.57	2.32	-2.81	-2.7
90.00	0	-0.	3.373	-0.578	-0.578	3.67	3.38	-3.96	-2.3
	0	-0.	4.241	-0.771	-0.771	4.64	4.26	-5.03	-2.4
100.00	0	-0.	4.723	-0.867	-0.867	5.17	4.74	-5.61	-2.4
110.00	0	-0.	5.108	-0.964	-0.964	5.61	5.13	-6.09	-2.5
120.00	0	-0.	5.397	-1.253	-1.253	6.06	5.43	-6.68	-3.0
130.00	0	0.096	5.783	-1.446	-1.446	6.50	5.83	-7.18	-3.4
140.00	0	0.289	6.265	-1.638	-1.638	7.01	6.33	-7.68	-4.0
150.00	0	0.386	6.843	-1.928	-1.928	7.70	6.93	-8.47	-4.3
160.00	0	2.506	14.650	-7.614	-7.614	17.93	15.38	-20.49	-8.2
170.00	0	1.349	3.277	-8.578	-8.578	8.49	4.88	-12.11	-17.9
180.00	0	6.747	1.157	-5.108	-5.108	5.94	6.76	-5.12	-43.4
.00	0	-7.421	-10.120	-1.928	-1.928	6.10	1.42	-10.77	76.6

CALC	Stamp	7/12/62	REVISED	DATE
CHECK	06-06-2			
APR	SHIMONO	7/13/62		
APR	Chabe	7/13/62		
TITLE-CORRUGATED SHEAR WEB PANEL				
EWA NO. 05652				
SPEC NO. 0102				
COND NO. 01				
JUN 01				
THE BOEING COMPANY				
EWA				
5-652				
D2-8008				
PAGE				
FIG. 110				

STRAIN

ROSETTE NO. 10

% LOAD	Room Temp	100's OF $\mu\text{IN}/\text{IN}$					°F		
		B-C 4-4	B-C 5-4	B-C 6-4	EA	EB	EC	TX-E	EX
0.00	0	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
10.00	0	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
50.00	0	0.193	0.096	0.096	0.193	0.096	0.096	0.07	0.02
70.00	0	0.386	0.096	0.096	0.386	0.096	0.096	0.55	0.31
90.00	0	0.578	0.193	0.193	0.578	0.193	0.193	0.84	0.51
100.00	0	0.578	0.193	0.193	0.578	0.193	0.193	1.12	0.74
110.00	0	0.867	0.096	0.096	0.867	0.096	0.096	1.26	0.77
120.00	0	0.867	0.096	0.096	0.867	0.096	0.096	1.47	0.99
130.00	0	0.964	0.096	0.096	0.964	0.096	0.096	1.53	1.00
140.00	0	1.060	0.096	0.096	1.060	0.096	0.096	1.75	1.12
150.00	0	1.253	0.096	0.096	1.253	0.096	0.096	1.90	1.22
160.00	0	0.096	0.193	0.193	0.096	0.193	0.193	2.01	1.39
170.00	0	0.096	0.193	0.193	0.096	0.193	0.193	2.05	0.74
180.00	0	-2.024	-1.157	-2.313	-2.024	-1.157	-2.313	1.38	0.22
0.00	0	-0.386	-0.482	-0.386	-0.386	-0.482	-0.386	1.02	-1.15
								0.10	-0.29

CALC	8/1/62	7/12/62	REVISED	DATE	EWA
CHECK	06-06-2				5-652
APR	SHIMONO	7/13/62			TITLE-CORRUGATED SHEAR WEB PANEL
APR	Chabon	7/13/62			EWA NO. 05652 SPEC NO. 0102
					COND NO. 01 RUN 01
					THE BOEING COMPANY
					PAGE
					FIG. 111
					CONTRACT NO.

STRESS
ROSETTE TABULATIONS

ROSETTE NOS. 1 to 10

LOAD ~ %

TEMPERATURE ~ ROOM TEMPERATURE

SA
SB } Stress for respective gage elements A, B, & C in 1000's of PSI.
SC }

TX-P -- Maximum shear stress ~ 1000's of PSI.

FX -- Maximum principal stress ~ 1000's of PSI.

FN -- Minimum principal stress ~ 1000's of PSI.

TH -- Theta is angle between EX & gage B ~ degrees.
Negative angle in gage A direction.

FA -- Component of normal stress through gage A ~ 1000's of PSI.

FC -- Component of normal stress through gage C ~ 1000's of PSI.

TC -- Component of shear stress at gage C.

Note: Each Rosette Gage must be located on specimen to read clockwise for gages A, B, & C in rectangular pattern.

Signs: Negative sign means Compression except for TX which shows no sign and TC which negative means a counter-clockwise shear couple, termed left couple.

$E = 30 \times 10^6 \text{ PSI}$

$\mu = 0.30$

CALC	Strickland	7/17/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL	EWA
CHECK					EWA NO. 05652 SPEC NO. 0102	5-652
APPD					COND NO. 01 RUN 01	D2-80081
APPD					BOEING AIRPLANE COMPANY	PAGE FIG. 112

STRESS

ROSETTE NO. 1

% LOAD	ROOM TEMP	THOUSANDS OF PSI			THOUS. OF PSI			TH	THOUS. OF PSI			TC
		B-C 1-1	B-C 2-1	B-C 3-1	SA	SB	SC	TX-F	FX	FN	FA	FC
0.00	0	-0.	-0.	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.	0.
10.00	0	-0.	4.915	1.157	0.	4.915	1.157	3.37	4.19	-2.54	0.38	1.27
50.00	0	1.735	27.468	5.494	1.735	27.468	5.494	18.41	23.57	-13.24	3.72	6.61
70.00	0	4.337	39.901	8.096	4.337	39.901	8.096	25.95	34.83	-17.07	7.43	10.33
90.00	0	8.674	54.069	10.409	8.674	54.069	10.409	34.26	47.89	-20.63	12.96	14.30
100.00	0	11.276	61.298	11.566	11.276	61.298	11.566	38.37	54.68	-22.05	16.20	16.43
110.00	0	14.168	68.237	12.722	14.168	68.237	12.722	42.15	61.36	-22.95	19.76	18.65
120.00	0	18.216	76.622	13.590	18.216	76.622	13.590	46.74	69.46	-24.02	24.50	20.94
130.00	0	23.999	85.585	15.035	23.999	85.585	15.035	50.94	78.82	-23.06	31.33	24.43
140.00	0	33.251	96.382	18.505	33.251	96.382	18.505	54.53	91.50	-17.56	42.64	31.30
150.00	0	33.829	99.273	19.083	33.829	99.273	19.083	56.30	94.09	-18.51	43.46	32.12
160.00	0	30.071	52.045	-4.337	30.071	52.045	-4.337	32.91	51.29	-14.53	31.61	5.15
170.00	0	38.745	19.662	-21.686	38.745	19.662	-21.686	24.77	36.95	-12.59	35.43	-11.06
180.00	0	55.515	20.240	-21.396	55.515	20.240	-21.396	29.68	54.05	-5.31	53.95	-5.21
0.00	0	9.252	-26.312	-17.638	9.252	-26.312	-17.638	19.91	13.92	-25.90	4.35	-16.33
												-17.01

CALC	STRICKLAND	7/2/62	REVISED	DATE	EWA
CHECK	06-06-2				5-652
APR	SHIMONO	7/13/62			
APR	Chabe	7/13/62			
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND NO. 01 SPEC NO. 0102 3UN 01					D2-80081
THE BOEING COMPANY					PAGE
CONTRACT NO.					F16-113

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STRESS

ROSETTE NO. 2

B-C B-C B-C
4-1 5-1 6-1

ROOM TEMP	SA	SB	SC	TX-F	FX	FN	TH	FA	FC	TC
% LOAD	THOUSANDS OF PSI - - - - -									
0	-0.	-0.	-0.	0.	-0.	-0.	-0.0	-0.	-0.	0.
10.00	-0.	4.626	-0.	3.56	3.56	-3.56	-0.0	0.	0.	3.56
50.00	-1.735	22.842	1.157	17.83	17.41	-18.24	1.8	-1.53	0.70	17.79
70.00	-2.024	32.384	1.446	25.17	24.76	-25.58	1.5	-1.75	0.92	25.13
90.00	-1.446	43.371	2.024	33.17	33.58	-32.75	1.2	-0.92	1.75	33.14
100.00	-1.157	48.865	2.602	37.06	38.09	-36.03	1.1	-0.41	2.48	37.03
110.00	-0.	53.780	2.891	40.27	42.34	-38.21	0.8	0.95	3.18	40.26
120.00	1.157	60.430	3.759	44.61	48.12	-41.09	0.6	2.51	4.51	44.59
130.00	3.181	66.791	4.626	48.38	53.95	-42.80	0.3	5.02	6.13	48.38
140.00	8.096	74.598	6.939	51.60	62.34	-40.86	-0.2	11.18	10.29	51.60
150.00	-5.494	102.435	33.540	69.65	89.68	-49.61	6.2	5.02	35.05	68.01
160.00	-97.153	31.805	58.117	71.59	43.71	-99.47	28.3	-87.60	31.84	39.48
170.00	-116.528	39.323	24.288	85.17	19.28	-151.05	19.7	-120.04	-11.72	65.73
180.00	999.999	999.999	999.999							
-00	-1.735	999.999	26.312							

CALC	STRICKLAND	7/2/62	REVISED	DATE	EWA
CHECK	06-06-2				5-652
APR	SHIMANO	7/13/62			
APR	<i>Ok</i>	7/13/62			
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 SPEC NO. 0102 3 JUL 61 THE BOEING COMPANY					D2-80081
CONTRACT NO.					PAGE FIG. 114

STRESS

ROSETTE NO. 3

LOAD	ROOM TEMP	B-C	B-C 7-1	B-C 8-1	B-C 1-2	1000'S OF PSI	SC	IX-F	FX	FN	TH	FA	1000'S OF PSI	FC	TC
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CALC	STRICKLAND	7/2/62	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL	EWA
CHECK	06-06-2				EWA NO. 05652	5-652
APR	SHIMONP	7/13/62			SPEC NO. 0102	
APR	<i>Chen</i>	7/13/62			COND NO. 01	02-80081
					THE BOEING COMPANY	
						PAGE
						FIG. 115

CONTRACT NO.

ROSETTE NO. 4

CALL	STATION AND	RECEIVED	DATE
CHECK	06-06-2		7/26/72
APR	SHIMONO		7/26/72
APR	Choten		7/17/72

9116.116

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STRESS

ROSETTE NO. 5

B-C B-C B-C
5-2 6-2 7-2

LOAD	ROOM TEMP	SA	SB	SC	TX-F	FX	FN	TH	FA	FC	TC
90											
00	0	-0.	-0.	-0.	0.	-0.	-0.	-0.0	-0.	-0.	0.
10.00	0	-1.157	2.891	-0.	2.71	1.88	-3.53	4.7	-1.27	-0.38	2.67
50.00	0	-4.915	16.192	-0.	14.10	11.41	-16.78	4.8	-5.02	-0.35	13.90
70.00	0	-7.229	21.975	1.735	19.33	15.40	-23.25	5.1	-7.37	-0.48	19.02
90.00	0	-8.963	28.914	2.891	25.00	20.66	-29.33	5.3	-8.90	0.22	24.58
100.00	0	-10.120	32.095	3.181	27.83	22.87	-32.79	5.3	-10.07	0.16	27.36
110.00	0	-10.987	35.853	4.048	30.80	25.84	-35.75	5.4	-10.74	0.83	30.25
120.00	0	-11.566	39.034	4.626	33.28	28.33	-38.24	5.4	-11.18	1.27	32.70
130.00	0	-12.144	43.371	5.494	36.55	31.81	-41.30	5.3	-11.53	2.03	35.92
140.00	0	-13.011	46.841	6.361	39.30	34.55	-44.05	5.5	-12.20	2.70	38.59
150.00	0	-13.011	52.045	6.939	43.06	38.72	-47.40	5.1	-12.01	3.34	42.37
160.00	0	-59.563	34.119	34.986	50.96	33.40	-68.51	22.8	-53.92	18.81	35.70
170.00	0	-39.323	27.468	9.831	37.57	16.51	-58.64	15.1	-39.97	-2.16	32.47
180.00	0	-47.997	23.420	-6.361	42.09	3.26	-80.91	11.2	-54.84	-22.81	38.92
.00	0	45.395	40.480	6.361	18.75	55.72	18.22	-26.6	51.98	21.95	11.23

CALC	STRICKLAND	7/2/62	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC NO. 0102 COND NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	06-06-2					5-657
APR	SHIMONO	7/13/62				02-80081
APR	Chabaz	7/13/62				PAGE
CONTRACT NO.						FIG. 117

ROSETTE NO. 6

LOAD	ROOM TEMP	B-C		B-C		B-C		1000'S OF PSI		1000'S OF PSI		1000'S OF PSI		1000'S OF PSI		FA	FC	TC
		8-2	8-1	8-2	8-1	8-2	8-1	8-2	8-1	8-2	8-1	8-2	8-1	8-2	8-1			
0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00	0	1.735	4.337	-0.0	-1.446	0.0	3.45	-0.0	3.66	-0.0	-3.24	-0.0	-10.4	-0.0	1.43	-0.0	-1.02	3.23
50.00	0	11.276	22.553	-1.446	-5.494	3.45	16.44	-1.446	20.57	3.66	-12.31	-10.4	-11.5	-10.4	10.58	-1.02	-2.32	15.12
70.00	0	15.035	30.649	-5.494	-8.096	16.44	22.72	-8.096	27.68	20.57	-17.76	-11.5	-11.5	-11.5	13.85	-2.32	-3.94	20.91
90.00	0	18.505	40.190	-8.096	-10.409	22.72	29.94	-10.409	35.73	27.68	-24.16	-10.9	-10.9	-10.9	16.90	-3.94	-5.34	27.80
100.00	0	19.662	44.528	-10.409	-11.566	29.94	33.37	-11.566	39.16	35.73	-27.59	-10.5	-10.5	-10.5	17.79	-5.34	-6.23	31.14
110.00	0	20.240	49.154	-11.566	-11.566	33.37	36.58	-11.566	42.78	39.16	-30.38	-9.8	-9.8	-9.8	18.43	-6.23	-6.04	34.47
120.00	0	20.529	53.202	-11.855	-11.855	36.58	39.60	-11.855	45.79	42.78	-33.40	-9.2	-9.2	-9.2	18.65	-6.04	-6.26	37.59
130.00	0	20.529	57.828	-12.722	-12.722	39.60	43.41	-12.722	48.98	45.79	-37.83	-8.6	-8.6	-8.6	18.36	-6.26	-7.21	41.48
140.00	0	20.240	61.876	-13.300	-13.300	43.41	46.74	-13.300	51.70	48.98	-41.79	-8.0	-8.0	-8.0	17.86	-7.21	-7.94	44.93
150.00	0	18.216	66.213	-15.903	-15.903	46.74	51.74	-15.903	53.39	51.70	-50.08	-7.3	-7.3	-7.3	14.77	-7.94	-11.47	50.04
160.00	0	101.785	71.996	-6.939	-6.939	51.74	45.89	-6.939	113.63	53.39	21.85	-32.8	-32.8	-32.8	109.56	-11.47	25.93	18.90
170.00	0	111.352	55.804	-34.986	-34.986	45.89	57.89	-34.986	112.44	113.63	-3.35	-38.2	-38.2	-38.2	110.83	25.93	-1.74	13.55
180.00	0	113.456	89.923	4.915	4.915	57.89	47.98	4.915	132.52	112.44	36.57	-30.2	-30.2	-30.2	126.29	-1.74	42.80	23.64
0.00	0	37.877	-10.120	8.674	8.674	47.98	28.04	8.674	61.29	132.52	5.21	-78.2	-78.2	-78.2	44.48	42.80	22.02	-25.69

CONTRACT NO.					PAGE		FIG. 118
					THE BOEING COMPANY		
					COND. NO. 01		
					SPEC NO. 0102		
					EWA NO. 05652		
					TITLE-CORRUGATED SHEAR WEB PANEL		
APR	SHIMOND	7/13/62			EWA		
APR	Chloe	7/13/62			5-652		
CHECK	06-06-2	7/13/62			EWA		
CALC	STRICKLAND	7/13/62			5-652		

ROSETTE NO. 7

STRESS

% LOAD	ROOM TEMP	B-C			1000's OF PSI			1000's OF PSI			TH	FA	FC	TC
		B-C 3-3	B-C 4-3	B-C 5-3	SA	SB	SC	TX-F	FX	FN				
-00	0	-0.	-0.	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.0	-0.	-0.	0.
10.00	0	-0.	1.157	-1.157	1.735	1.157	1.41	0.58	0.58	-2.23	-9.2	-1.27	1.33	
50.00	0	1.735	6.939	-5.494	7.33	4.65	7.33	4.65	4.65	-10.02	-11.1	-5.46	6.78	
70.00	0	2.891	10.120	-8.096	10.66	6.94	10.66	6.94	6.94	-14.38	-11.7	-7.94	9.79	
90.00	0	3.470	12.722	-9.831	13.26	8.72	13.26	8.72	8.72	-17.80	-11.3	-9.66	12.23	
100.00	0	3.759	14.168	-10.698	14.66	9.71	14.66	9.71	9.71	-19.62	-11.1	-10.52	13.57	
110.00	0	4.048	15.614	-11.566	16.07	10.70	16.07	10.70	10.70	-21.44	-11.0	-11.37	14.90	
120.00	0	4.048	17.348	-11.566	17.31	11.94	17.31	11.94	11.94	-22.68	-10.1	-11.37	16.24	
130.00	0	4.337	15.903	-12.144	16.50	10.93	16.50	10.93	10.93	-22.08	-11.3	-11.91	15.24	
140.00	0	4.337	20.240	-12.722	19.91	13.92	19.91	13.92	13.92	-25.90	-9.6	-12.55	18.79	
150.00	0	4.626	22.842	-13.300	22.01	15.82	22.01	15.82	15.82	-28.21	-9.1	-13.09	20.91	
160.00	0	21.107	58.406	-25.733	50.06	46.76	50.06	46.76	46.76	-53.37	-10.5	-21.32	46.71	
170.00	0	80.959	74.887	-18.505	50.91	95.51	50.91	95.51	95.51	-6.30	-24.4	6.35	33.58	
180.00	0	95.994	83.851	-29.203	61.85	109.55	61.85	109.55	109.55	-14.14	-25.6	-0.45	38.81	
-00	0	33.540	19.951	3.470	11.62	38.05	11.62	38.05	38.05	14.82	-42.3	14.87	1.11	

CONTRACT NO.					PAGE		FIG. 119
APR	Charles	7/12/62			THE BOEING COMPANY		
APR	SHIMONO	7/12/62			COND NO. 01 RUN 01		
CHECK	06-06-2	7/12/62	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL		
CALC	STRICKLAND	7/12/62			EWA NO. 05652 SPEC NO. 3102		
					EWA		02-80081
					5-652		

ROSETTE NO. 8

CAIC	STRICKLAND	7/2/62	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652 D2-80081
CHECK	06-06-2					
APR	SHIMODA	7/13/62				
APR	Chabon	7/13/62				
CONTRACT NO.						PAGE F16.120

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STRESS

ROSETTE NO. 9

% LOAD	Room TEMP	1000'S OF PSI				PSI				1000'S OF PSI				
		B-C 1-4	B-C 2-4	B-C 3-4	SA	SB	SC	TX-F	FX	FN	TH	FA	FC	TC
-00	0	-0-	-0-	-0-	-0-	-0-	0-	0-	-0-	-0-	-0.0	-0-	-0-	0-
10.00	0	-0-	1.157	-0.867	-0-	1.157	1.27	0.65	-1.89	-7.6	-0.29	-0.95	1.22	0-
50.00	0	-0-	6.939	-1.446	-0-	6.939	5.92	4.89	-6.95	-2.7	-0.48	-1.59	5.89	1.22
70.00	0	-0-	10.120	-1.735	-0-	10.120	8.48	7.24	-9.72	-2.3	-0.57	-1.91	8.45	5.89
90.00	0	-0-	12.722	-2.313	-0-	12.722	10.71	9.06	-12.37	-2.4	-0.76	-2.54	10.68	8.45
100.00	0	-0-	14.168	-2.602	-0-	14.168	11.94	10.08	-13.80	-2.4	-0.86	-2.86	11.90	10.68
110.00	0	-0-	15.324	-2.891	-0-	15.324	12.95	10.88	-15.01	-2.5	-0.95	-3.18	12.90	11.90
120.00	0	-0-	16.192	-3.759	-0-	16.192	13.98	11.29	-16.66	-3.0	-1.24	-4.13	13.90	12.90
130.00	0	0.289	17.348	-4.337	0.289	17.348	15.01	12.12	-17.90	-3.4	-1.11	-4.67	14.90	13.90
140.00	0	0.867	18.794	-4.915	0.867	18.794	16.17	13.28	-19.06	-4.0	-0.67	-5.12	16.01	14.90
150.00	0	1.157	20.529	-5.783	1.157	20.529	17.77	14.47	-21.08	-4.3	-0.64	-5.97	17.57	16.01
160.00	0	7.518	43.949	-22.842	7.518	43.949	41.38	30.44	-52.33	-8.2	0.73	-22.62	39.70	17.57
170.00	0	4.048	9.831	-25.733	4.048	9.831	19.60	4.11	-35.09	-17.9	-4.03	-26.94	15.90	39.70
180.00	0	20.240	3.470	-15.324	20.240	3.470	13.70	17.21	-10.19	-43.4	17.19	-10.17	0.78	15.90
.00	0	-22.264	-30.360	-5.783	-22.264	-30.360	14.07	-5.96	-34.11	76.6	-26.37	-13.69	-12.57	0.78

CALC	STRICKLAND	7/12/62	REVISED	DATE	EWA
CHECK	06-06-2				5-652
APR	SHIMONO	7/13/62			TITLE-CORRUGATED SHEAR WEB PANEL
APR	<i>Chilton</i>	7/13/62			EWA NO. 05652 SPEC NO. 0102
					CONTRACT NO. 01 RUN 01
					THE BOEING COMPANY
					PAGE
					F/6.121

ROSETTE NO. 10

CONTRACT NO.				
APR	<i>Chabon</i>			
APR	SHIMONO	7/13/52		
CHECK	06-06-2	7/10/51		
CALC	<i>Stapp</i>	7/10/51	REVISED	DATE

STRAIN ROSETTE TABULATIONS

ROSETTE NOS. 1, 3, 5, 7, 9, 11, 13, 15, 17, & 19 (See Note Below)

LOAD ~ 4

TEMPERATURE ~ ROOM

EA }
EB } Strain for respective gage elements A, B, & C
EC } in 100's of Micro-Inches/Inch.

TX-E -- Maximum shear strain in 100's of Micro-Inches/Inch.

EX -- Maximum principal strain in 100's of Micro-Inches/Inch.

EN -- Minimum principal strain in 100's of Micro-Inches/Inch.

TH -- Theta is an angle between EX and gage B ~ degrees.
Negative in gage A direction.

Note: Each Rosette Gage must be located on specimen to read clockwise for gages A, B, & C in rectangular pattern.

Signs: Negative sign means Compression except for TX which shows no sign. and which negative means couple, - tension, + compression.

Note: The corresponding element readings from all back to back Rosettes were averaged arithmetically and identified as the odd numbered Rosette. See Figure 20 for Rosette locations.

CALC	<i>Stapp</i>	7/17/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. NO. 0103 COND. NO. 01 RUN 01 BOEING AIRPLANE COMPANY	EWA 5-652
CHECK						
APPD	<i>Plotter</i>	8/1/62				D2-80081
APPD						PAGE FIG. 123

2-5311

• 8847-X

[illegible]

STRAIN

ROSETTE NO. 3

% LOAD	ROOM TEMP	B-C		B-C		B-C		-100'S OF μ IN/IN		EX		EN		L° TH
		7-1	8-1	8-1	1-2	EA	EB	EC	TX-E					
0.00	0	-0.	-0.	-0.	-0.	-0.	0.	0.	0.	-0.	-0.	-0.	-0.0	
10.00	0	0.145	1.783	1.783	0.048	0.145	1.69	0.048	1.69	1.78	1.78	-1.59	-0.8	
40.00	0	0.193	6.795	6.795	0.096	0.193	6.65	0.096	6.65	6.79	6.79	-6.51	-0.2	
60.00	0	0.482	10.554	10.554	0.096	0.482	10.27	0.096	10.27	10.56	10.56	-9.98	-0.5	
10.00	0	0.096	1.446	1.446	0.048	0.096	1.37	0.048	1.37	1.45	1.45	-1.30	-0.5	
60.00	0	0.386	10.457	10.457	0.048	0.386	10.24	0.048	10.24	10.46	10.46	-10.02	-0.5	
80.00	0	0.675	14.216	14.216	0.	0.675	13.88	0.	13.88	14.22	14.22	-13.55	-0.7	
10.00	0	0.096	1.446	1.446	-0.	0.096	1.40	-0.	1.40	1.45	1.45	-1.35	-1.0	
80.00	0	0.626	14.216	14.216	-0.048	0.626	13.93	-0.048	13.93	14.22	14.22	-13.64	-0.7	
90.00	0	0.771	16.144	16.144	0.	0.771	15.76	0.	15.76	16.15	16.15	-15.38	-0.7	
100.00	0	0.964	17.589	17.589	-0.	0.964	17.11	-0.	17.11	17.60	17.60	-16.63	-0.8	
10.00	0	0.145	1.928	1.928	-0.	0.145	1.86	-0.	1.86	1.93	1.93	-1.78	-1.1	
100.00	0	0.964	17.830	17.830	-0.096	0.964	17.40	-0.096	17.40	17.84	17.84	-16.97	-0.9	
110.00	0	1.157	19.806	19.806	-0.096	1.157	19.29	-0.096	19.29	19.82	19.82	-18.76	-0.9	
120.00	0	1.446	21.493	21.493	0.145	1.446	20.71	0.145	20.71	21.50	21.50	-19.91	-0.9	
10.00	0	0.241	1.783	1.783	-0.	0.241	1.67	-0.	1.67	1.79	1.79	-1.55	-2.1	
120.00	0	1.349	21.252	21.252	0.145	1.349	20.51	0.145	20.51	21.26	21.26	-19.77	-0.8	
180.00	0	-2.169	13.879	13.879	0.867	-2.169	14.61	0.867	14.61	13.96	13.96	-15.26	3.0	
0.00	0	-0.482	-5.253	-5.253	-2.602	-0.482	3.86	-2.602	3.86	2.32	2.32	-5.40	-82.0	

CALC	STRICKLAND	7/12/62	REVISED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652 D2-80081
CHECK	07-02-2					
APR	SHIMONO	7/31/62				
APR						
CONTRACT NO.					PAGE	
					FIG. 125	

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STRAIN

ROSETTE NO. 5

LOAD	ROOM TEMP	B-C	100's OF <i>million</i>					EX	EN	TH
			B-C 5-2	B-C 6-2	B-C 7-2	EA	EB			
0.00	0		-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.0
10.00	0		-0.145	1.976	0.337	1.976	1.89	1.99	-1.80	3.7
40.00	0		-0.723	7.373	1.012	7.373	7.28	7.42	-7.14	3.4
60.00	0		-0.916	11.373	1.253	11.373	11.26	11.43	-11.09	2.8
10.00	0		-0.048	1.590	0.193	1.590	1.52	1.60	-1.45	2.3
60.00	0		-0.916	11.180	1.205	11.180	11.09	11.23	-10.94	2.7
80.00	0		-1.108	15.180	1.494	15.180	15.04	15.24	-14.85	2.5
10.00	0		-0.096	1.735	0.145	1.735	1.71	1.74	-1.69	2.0
80.00	0		-1.108	15.180	1.494	15.180	15.04	15.24	-14.85	2.5
90.00	0		-1.205	17.204	1.687	17.204	17.02	17.27	-16.78	2.4
100.00	0		-1.301	18.842	1.976	18.842	18.58	18.91	-18.24	2.5
10.00	0		-0.193	2.265	0.241	2.265	2.25	2.28	-2.23	2.8
100.00	0		-1.446	19.131	2.072	19.131	18.90	19.21	-18.59	2.7
110.00	0		-1.446	21.493	2.506	21.493	21.06	21.59	-20.53	2.7
120.00	0		-1.638	23.806	3.759	23.806	22.91	23.97	-21.85	3.4
10.00	0		-0.145	2.120	0.241	2.120	2.08	2.13	-2.03	2.7
120.00	0		-1.638	23.420	3.132	23.420	22.80	23.55	-22.05	3.0
130.00	0		-5.783	17.204	1.638	17.204	19.63	17.56	-21.70	5.4
0.00	0		-2.024	-3.807	-0.530	-3.807	2.64	1.36	-3.91	81.8

CALC	STRICKLAND	7/12/62	REVIEWED	DATE
CHECK	UT-02-2			
APR	SHIMONO	7/31/62		
APR				
CONTRACT NO.				
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 SPEC NO. 0103 RUN 01 THE BOEING COMPANY				
EWA 5-652				
D2-80081				
PAGE				
FIG. 126				

145

11-5311

X-4933

STRAIN

ROSETTE NO. 7

B-C

B-C
4-3

B-C
5-3

B-C
6-3

ROOM
TEMP

100'S OF *MIN*

TH

%
LOAD

EA	EB	EC	TX-F	EX	EN	TH
-0.	-0.	-0.	0.	-0.	-0.	-0.0
0.241	1.253	0.	1.14	1.26	-1.02	-3.0
-0.	5.686	0.145	5.61	5.69	-5.54	0.4
-0.434	9.012	1.157	8.69	9.05	-8.33	2.6
0.145	1.301	0.289	1.09	1.30	-0.87	1.9
-0.434	8.915	1.205	8.57	8.95	-8.18	2.7
-0.675	12.385	1.976	11.81	12.46	-11.16	3.2
-0.	1.349	0.482	1.13	1.38	-0.89	6.1
-0.723	12.337	2.024	11.77	12.42	-11.12	3.4
-0.867	13.975	2.169	13.41	14.06	-12.76	3.2
-0.867	15.180	2.361	14.52	15.27	-13.78	3.2
-0.096	1.687	0.482	1.52	1.71	-1.33	5.5
-0.867	15.324	2.361	14.67	15.41	-13.92	3.2
-0.916	17.252	2.554	16.52	17.34	-15.70	3.0
-1.060	18.842	2.650	18.14	18.94	-17.35	2.9
-0.096	1.638	0.482	1.47	1.67	-1.28	5.7
-0.916	18.650	2.554	17.91	18.73	-17.10	2.8
1.060	22.119	-2.891	23.12	22.20	-24.04	-2.5
0.771	1.060	-1.879	2.09	1.53	-2.64	-19.7

CALC	STICKLAND	7/12/52	REVISED	DATE
CHECK	07-02-2			
APR	SHIMONO	7/31/52		
APR				

TITLE-CORRUGATED SHEAR WEB PANEL
EWA NO. 05652 SPEC NO. 0103
COND NO. 01 RUN 01

THE BOEING COMPANY

EWA
5-652

02-80091

PAGE

FIG. 127

CONTRACT NO.

STRAIN

ROSETTE NO. 9

[illegible]

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STRAIN									
ROSETTE NO. 11									
LOAD	ROOM TEMP	B-C				100'S OF μ IN/IN			
		B-C 8-4	B-C 1-5	B-C 2-5	EC	TX-F	EX	EN	TH
0	0	-0.193	-0.145	-0.048	-0.048	0.482	0.482	-0.048	-0.048
10.00	0	4.482	6.120	9.012	1.590	1.48	1.63	-1.34	6.6
40.00	0	-0.145	9.012	1.398	1.879	3.21	6.40	-0.03	-11.9
60.00	0	-0.048	1.398	0.289	1.783	8.25	9.07	-7.43	3.4
10.00	0	-0.145	1.398	0.289	0.289	1.29	1.41	-1.17	3.8
60.00	0	-0.145	8.867	1.735	1.735	8.13	8.92	-7.33	3.3
80.00	0	-0.145	11.855	1.783	1.783	11.08	11.90	-10.26	2.5
10.00	0	-0.096	1.398	0.145	0.145	1.33	1.40	-1.25	1.6
80.00	0	-0.096	11.807	1.687	1.687	11.05	11.84	-10.25	2.3
90.00	0	-0.145	13.349	1.976	1.976	12.48	13.39	-11.56	2.4
100.00	0	-0.145	14.553	2.265	2.265	13.55	14.61	-12.49	2.6
10.00	0	-0.048	1.783	0.289	0.289	1.67	1.79	-1.55	2.9
100.00	0	-0.096	14.746	2.361	2.361	13.67	14.80	-12.54	2.6
110.00	0	-0.193	16.529	2.554	2.554	15.41	16.59	-14.23	2.6
120.00	0	-0.145	18.023	2.747	2.747	16.78	18.09	-15.48	2.5
10.00	0	-0.193	1.687	0.337	0.337	1.53	1.70	-1.36	3.2
120.00	0	-1.301	17.782	2.795	2.795	16.55	17.85	-15.25	2.6
130.00	0	0.048	22.601	1.494	1.494	22.55	22.64	-22.45	1.8
0.00	0	0.048	2.458	0.048	0.048	2.41	2.46	-2.36	-0.0

CALC	STRICKLAND	DATE	1/12/62
CHECK	07-02-2		
APR	SHIMONO	DATE	7/31/62
APR			
TITLE-CORRUGATED SHEAR WEB PANEL			
EWA NO. 05652			
COND NO. 01			
SPEC NO. 0103			
RUN 01			
THE BOEING COMPANY			
CONTRACT NO.			
EWA			
5-652			
D2-80091			
PAGE			
F16. 129			

STRAIN

ROSETTE NO. 13

B-C
7-5
B-C
8-5
B-C
1-6

B-C

LOAD
90
10.00
40.00
60.00
10.00
60.00
80.00
10.00
80.00
90.00
100.00
10.00
100.00
110.00
120.00
10.00
120.00
130.00
0.00ROOM
TEMP
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0EA
-0.096
0.096
0.096
-0.096
-0.096
0.241
0.337
0.096
0.337
0.337
0.434
0.048
0.337
0.386
0.434
0.096
0.434
0.434
-0.145EB
-0.096
0.241
2.650
4.048
0.723
4.144
5.349
0.675
5.301
5.879
6.361
0.867
7.759
7.132
7.759
0.867
7.759
11.325
1.542EC
-0.096
0.193
-0.096
-0.482
-0.096
-0.482
-1.108
-0.096
-1.108
-1.301
-1.205
-0.096
-1.108
-1.253
-1.205
-0.096
-1.157
-1.060
0.386TX-E
0.096
0.39
2.60
4.34
0.72
4.28
5.78
0.63
5.73
6.41
6.80
0.84
6.83
7.61
8.19
0.82
8.16
11.66
1.45EX
-0.096
0.24
2.65
4.05
0.72
4.16
5.39
0.68
5.35
5.93
6.41
0.87
6.45
7.18
7.80
0.87
7.80
11.35
1.57EN
-0.096
-0.53
-2.55
-4.63
-0.72
-4.40
-6.17
-0.58
-6.12
-6.90
-7.18
-0.82
-7.22
-8.04
-8.57
-0.77
-8.52
-11.98
-1.33TH
-0.0
-3.6
-0.5
-1.3
-0.0
-2.4
-3.6
-2.2
-3.6
-3.7
-3.5
-0.8
-3.0
-3.1
-2.9
-1.7
-2.8
-1.8
5.3

CALC	STRICKLAND	REVISED	DATE
CHECK	07-02-2		
APR	SHIMONO	7/31/62	
APR			

TITLE-CORRUGATED SHEAR WEB PANEL
EWA NO. 05652
COND NO. 01
SPEC NO. 0103
RUN 01

THE BOEING COMPANY

CONTRACT NO.

PAGE

FIG. 130

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STRAIN

ROSETTE NO. 15

LOAD	ROOM TEMP	B-C	B-C	B-C	100'S OF MIN					TH
		5-6	6-6	7-6	EA	EB	EC	TX-E	EX	EN
90										
-00	0	-0.	-0.	-0.	0.70	-0.	-0.482	0.70	-0.	-0.92
10.00	0	0.048	0.434	-0.482	0.70	0.49	-0.92	0.70	0.49	-0.92
40.00	0	0.723	1.783	-1.928	2.73	2.13	-3.33	2.73	2.13	-3.33
60.00	0	1.157	2.795	-2.795	4.12	3.30	-4.94	4.12	3.30	-4.94
10.00	0	0.096	0.337	-0.337	0.51	0.39	-0.63	0.51	0.39	-0.63
60.00	0	1.205	2.843	-2.699	4.09	3.34	-4.83	4.09	3.34	-4.83
80.00	0	1.590	3.759	-3.518	5.37	4.41	-6.33	5.37	4.41	-6.33
10.00	0	0.096	0.386	-0.386	0.58	0.44	-0.73	0.58	0.44	-0.73
80.00	0	1.590	3.855	-3.373	5.36	4.46	-6.25	5.36	4.46	-6.25
90.00	0	1.735	4.144	-3.855	5.91	4.85	-6.97	5.91	4.85	-6.97
100.00	0	1.928	4.578	-4.144	6.45	5.34	-7.55	6.45	5.34	-7.55
10.00	0	0.193	0.530	-0.482	0.75	0.61	-0.90	0.75	0.61	-0.90
100.00	0	1.928	4.674	-4.144	6.53	5.42	-7.64	6.53	5.42	-7.64
110.00	0	2.072	5.156	-4.530	7.19	5.96	-8.42	7.19	5.96	-8.42
120.00	0	2.265	5.494	-4.819	7.64	6.36	-8.92	7.64	6.36	-8.92
10.00	0	0.193	0.578	-0.193	0.61	0.61	-0.61	0.61	0.61	-0.61
120.00	0	2.265	5.590	-4.819	7.73	6.45	-9.00	7.73	6.45	-9.00
130.00	0	3.132	8.530	-6.265	11.14	9.57	-12.70	11.14	9.57	-12.70
.00	0	0.193	1.349	-0.048	1.28	1.35	-1.21	1.28	1.35	-1.21

CALC	STICKLAND	7/12/62	REVISED	DATE
CHECK	07-02-2			
APR	SHIMONO	7/31/62		
APR				
TITLE-CORRUGATED SHEAR WEB PANEL				
EWA NO. 05652 SPEC NO. 0103				
COND. NO. 01 RUN 01				
THE BOEING COMPANY				
CONTRACT NO.				
EWA				
5-652				
D2-80081				
PAGE				
F16.131				

150

STRAIN

ROSETTE NO. 17

970
LOAD

ROOM
TEMP

100'S OF $\mu\text{IN}/\text{IN}$

10^{-6}
TH

B-C

B-C
3-7

B-C
4-7

B-C
5-7

0
10.00
40.00
60.00
10.00
60.00
80.00
10.00
80.00
90.00
100.00
10.00
10.00
100.00
110.00
120.00
10.00
120.00
130.00
-0.00

EA
-0.
-0.
0.096
0.964
0.193
1.012
1.205
0.048
0.916
1.253
1.446
0.048
1.398
1.590
1.687
0.048
1.687
2.217
-0.
EB
-0.
0.386
1.446
2.602
0.289
2.650
3.759
0.386
3.807
4.193
4.482
0.530
4.530
5.012
5.397
0.626
5.397
8.192
1.398
EC
-0.
-0.
-3.132
-3.373
-0.482
-3.229
-3.903
-0.434
-3.759
-4.241
-4.578
-0.482
-4.626
-5.060
-5.542
-0.096
-5.542
-7.277
-0.
TX-F
0.
0.39
3.37
4.38
0.55
4.32
5.71
0.63
5.73
6.32
6.76
0.79
6.84
7.52
8.17
0.65
8.17
11.73
1.40
EX
-0.
0.39
1.86
3.18
0.40
3.21
4.36
0.43
4.31
4.82
5.19
0.58
5.23
5.79
6.24
0.63
6.24
9.20
1.40
EN
-0.
-0.39
-4.89
-5.59
-0.69
-5.42
-7.06
-0.82
-7.15
-7.81
-8.32
-1.01
-8.46
-9.26
-10.10
-0.68
-10.10
-14.26
-1.40
TH
-0.0
-0.0
-14.3
-14.8
-18.9
-14.7
-13.3
-11.3
-12.0
-12.9
-13.2
-9.8
-13.1
-13.1
-13.1
-3.2
-13.1
-11.9
-0.0

CALC	STRICKLAND	7/12/62	REVISED	DATE
CHECK	07-02-2			
APR	SHIMONO	7/31/62		
APR				
CONTRACT NO.				
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND NO. 01 SPEC NO. 0103 RUN 01 THE BOEING COMPANY				
EWA 5-652				
DZ-80081				
PAGE				
F16.132				

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STRAIN

ROSETTE NO. 19

LOAD	ROOM TEMP	100'S OF $\mu\text{IN/IN}$				TX-E	EX	EN	TH
		B-C 4-8	B-C 5-8	B-C 6-8	EC				
0	0	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.0
10.00	0	-0.	-0.096	-0.096	-0.096	0.07	0.02	-0.12	-67.5
40.00	0	0.193	-0.193	-0.482	-0.482	0.34	0.20	-0.49	-49.1
60.00	0	0.386	-0.386	-0.867	-0.867	0.64	0.40	-0.88	-51.5
10.00	0	-0.	-0.096	-0.096	-0.096	0.07	0.02	-0.12	-67.5
60.00	0	0.386	-0.482	-0.964	-0.964	0.70	0.41	-0.99	-53.0
80.00	0	0.482	-0.482	-1.157	-1.157	0.83	0.49	-1.17	-50.0
10.00	0	0.096	-0.096	-0.096	-0.096	0.14	0.14	-0.14	-67.5
80.00	0	0.482	-0.482	-1.253	-1.253	0.87	0.49	-1.26	-48.2
90.00	0	0.578	-0.482	-1.446	-1.446	1.01	0.58	-1.45	-46.4
100.00	0	0.771	-0.482	-1.446	-1.446	1.12	0.78	-1.46	-48.7
10.00	0	0.193	-0.	-0.096	-0.096	0.15	0.20	-0.10	-54.2
100.00	0	0.578	-0.482	-1.446	-1.446	1.01	0.58	-1.45	-46.4
110.00	0	0.771	-0.482	-1.542	-1.542	1.16	0.78	-1.55	-47.4
120.00	0	0.675	-0.578	-1.831	-1.831	1.25	0.67	-1.83	-45.0
10.00	0	0.193	-0.	-0.	-0.	0.14	0.23	-0.04	-67.5
120.00	0	0.675	-0.578	-1.735	-1.735	1.21	0.68	-1.74	-46.1
130.00	0	0.386	-1.157	-2.120	-2.120	1.29	0.42	-2.15	-51.5
0.00	0	-0.	-0.193	-0.193	-0.193	0.14	0.04	-0.23	-67.5

CALC	STRICKLAND	7/12/62	REVISED	DATE
CHECK	07-02-2			
APR	SHIMONO	7/31/62		
APR				
TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 SPEC NO. 0103 RUN 01 THE BOEING COMPANY				
CONTRACT NO.				
EWA 5-652				
D2-80081				
PAGE				
FIG. 133				

**STRESS
ROSETTE TABULATIONS**

ROSETTE NOS. 1,3,5,7,9,11,13,15,17, & 19 (See Note Below)

LOAD ~ \$

TEMPERATURE ~ ROOM

SA }
SB } Stress for respective gage elements A, B, & C in 1000's of PSI.
SC }

TX-F -- Maximum shear stress ~ 1000's of PSI.

FX -- Maximum principal stress ~ 1000's of PSI.

FN -- Minimum principal stress ~ 1000's of PSI.

TH -- Theta is angle between EX & gage B ~ degrees.
Negative angle in gage A direction.

FA -- Component of normal stress through gage A ~ 1000's of PSI.

FC -- Component of normal stress through gage C ~ 1000's of PSI.

TC -- Component of shear stress at gage C.

Note: Each Rosette Gage must be located on specimen to read clockwise for gages A, B, & C in rectangular pattern.

Signs: Negative sign means Compression except for TX which shows no sign and TC which negative means a counter-clockwise shear couple, termed left couple.

Note: The corresponding element readings from all back to back Rosettes were averaged arithmetically and identified as the odd numbered Rosette. See Figure 20 for Rosette locations.

$$E = 30 \times 10^6 \text{ PSI}$$

$$\mu = 0.30$$

CALC	STOPP	7/17/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL TEST EWA NO 05652 SPEC. NO. 0103 COND. NO. 01 RUN 01	EWA 5-652
CHECK						
APPD	Choben	8/1/2				02-80081
APPD						
					BOEING AIRPLANE COMPANY	PAGE FIG. 134

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STRESS															
ROSETTE NO. 1															
LOAD	B-C	1-1	B-C	2-1	B-C	3-1	Room TEMP	1000's OF PSI				1000's OF PSI			
								SA	SB	SC	TX-F	FX	FN	TH	FA
10.00	0	0.145	-0.145	5.205	-0.145	-0.145	0	0.145	4.01	-0.01	-0.01	-0.01	-0.11	-0.11	0.00
40.00	0	1.012	20.818	-0.867	-0.867	-0.867	0	1.012	15.97	4.01	-0.8	-0.8	-0.11	-0.11	4.00
60.00	0	1.879	32.962	-0.434	-0.434	-0.434	0	1.879	24.82	16.08	-1.3	-1.3	-0.62	-0.62	15.96
10.00	0	-0.145	4.193	-0.145	-0.145	-0.145	0	-0.145	3.23	25.85	-1.0	-1.0	0.14	0.14	24.80
60.00	0	1.590	32.817	-0.289	-0.289	-0.289	0	1.590	24.75	25.68	-0.8	-0.8	0.00	0.00	3.23
80.00	0	2.458	44.528	-0.578	-0.578	-0.578	0	2.458	33.55	34.89	-1.0	-1.0	0.17	0.17	24.74
10.00	0	-0.145	4.626	-0.145	-0.145	-0.145	0	-0.145	3.56	3.56	-0.0	-0.0	0.00	0.00	33.53
80.00	0	2.313	44.817	-0.289	-0.289	-0.289	0	2.313	33.71	35.16	-0.9	-0.9	0.44	0.44	3.56
90.00	0	3.036	50.744	-0.867	-0.867	-0.867	0	3.036	38.23	39.78	-1.1	-1.1	0.05	0.05	33.70
100.00	0	3.759	55.804	-0.867	-0.867	-0.867	0	3.759	41.85	43.92	-1.2	-1.2	0.29	0.29	38.20
10.00	0	-0.289	0.145	6.217	6.217	6.217	0	-0.289	3.31	7.54	65.5	65.5	6.74	6.74	41.81
100.00	0	3.614	56.527	-1.157	-1.157	-1.157	0	3.614	42.58	44.33	-1.2	-1.2	-0.08	-0.08	-2.17
110.00	0	4.193	63.322	-1.301	-1.301	-1.301	0	4.193	47.64	49.71	-1.3	-1.3	-0.05	-0.05	42.54
120.00	0	4.915	70.406	0.723	0.723	0.723	0	4.915	52.01	56.04	-0.9	-0.9	2.41	2.41	47.60
10.00	0	0.578	5.927	-0.578	-0.578	-0.578	0	0.578	4.34	4.76	-1.5	-1.5	0.19	0.19	51.99
120.00	0	5.060	69.683	0.578	0.578	0.578	0	5.060	51.46	55.49	-1.0	-1.0	2.30	2.30	4.34
130.00	0	-2.747	47.853	25.155	25.155	25.155	0	-2.747	30.16	46.17	10.4	10.4	26.74	26.74	51.43
10.00	0	1.012	-9.108	5.349	5.349	5.349	0	1.012	9.60	14.14	85.0	85.0	6.21	6.21	28.19
CONTRACT NO.												THE BOEING COMPANY			
TITLE-CORRUGATED SHEAR WEB PANEL												EWA			
EWA NO. 05652												5-652			
COND NO. 01												02-80081			
SPEC NO. 0103												RUN 01			
DATE												7/12/62			
REVISED												7/31/62			
CALC												STRICKLAND			
CHECK												07-02-2			
APR												SHIMONO			
APR															
PAGE												F16.135			

1300

STRESS

ROSETTE NO. 3

B-C 7-1 B-C 8-1 B-C 1-2

LOAD	ROOM TEMP	SA	SB	SC	TX-F	FX	FN	TH	FA	FC	TC
0.00	0	-0.0	-0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0
10.00	0	0.434	5.349	0.145	3.89	4.31	-3.48	-0.8	0.52	0.30	3.89
40.00	0	0.578	20.384	0.289	15.35	15.97	-14.73	-0.2	0.73	0.51	15.35
60.00	0	1.446	31.661	0.289	23.69	24.93	-22.45	-0.5	1.68	0.79	23.69
10.00	0	0.289	4.337	0.145	3.17	3.48	-2.86	-0.5	0.37	0.25	3.17
60.00	0	1.157	31.372	0.145	23.63	24.56	-22.71	-0.5	1.32	0.54	23.63
80.00	0	2.024	42.648	-0.0	32.04	33.48	-30.59	-0.7	2.22	0.67	32.03
10.00	0	0.289	4.337	-0.0	3.23	3.43	-3.02	-1.0	0.32	0.10	3.23
80.00	0	1.879	42.648	-0.145	32.15	33.39	-30.91	-0.7	2.02	0.46	32.14
90.00	0	2.313	48.431	-0.0	36.38	38.03	-34.72	-0.7	2.54	0.76	36.36
100.00	0	2.891	52.768	-0.0	39.49	41.56	-37.43	-0.8	3.18	0.95	39.48
10.00	0	0.434	5.783	-0.0	4.28	4.59	-3.97	-1.1	0.48	0.14	4.28
100.00	0	2.891	53.491	-0.289	40.16	42.02	-38.31	-0.9	3.08	0.64	40.15
110.00	0	3.470	59.418	-0.289	44.51	46.78	-42.23	-0.9	3.72	0.83	44.48
120.00	0	4.337	64.478	0.434	47.79	51.19	-44.38	-0.9	4.91	1.91	47.76
10.00	0	0.723	5.349	-0.0	3.85	4.36	-3.33	-2.1	0.79	0.24	3.84
120.00	0	4.048	63.755	0.434	47.34	50.54	-44.14	-0.8	4.59	1.81	47.32
130.00	0	-6.506	41.636	2.602	33.71	30.92	-36.50	3.0	-6.29	0.72	33.53
-0.00	0	-1.446	-15.758	-7.807	8.91	2.30	-15.51	-82.0	-4.16	-9.06	-8.56

CALC	STICKS AND	7/12/62	REVISED	DATE
CHECK	07-02-2			
APR	SHIMONO	7/31/62		
APR				
TITLE-CORRUGATED SHEAR WEB PANEL				
EWA NO. 05652 SPEC NO. 0103				
COND NO. 01 RUN 01				
THE BOEING COMPANY				
PAGE				
Fig. 136				
CONTRACT NO.				

STRESS

ROSETTE NO. 5

LOAD	ROOM TEMP	1000'S OF PSI			1000'S OF PSI			1000'S OF PSI			TH	1000'S OF PSI			TC
		B-C	B-C	B-C	SA	SB	SC	TX-F	FX	FN		FA	FC	FC	
70															
10.00	0	0	0	0	-0.434	5.927	1.012	0.	-0.	-0.	-0.0	-0.	-0.	-0.	0.
40.00	0	0	0	0	-2.169	22.119	3.036	4.37	4.79	-3.96	3.7	-0.14	0.97	0.97	4.34
60.00	0	0	0	0	-2.747	34.119	3.759	16.80	17.42	-16.18	3.4	-1.38	2.62	2.62	16.68
80.00	0	0	0	0	-0.145	4.771	0.578	25.98	26.70	-25.25	2.8	-1.78	3.22	3.22	25.86
100.00	0	0	0	0	-2.747	33.540	3.614	3.51	3.82	-3.20	2.3	0.03	0.59	0.59	3.50
120.00	0	0	0	0	-3.325	45.540	4.482	25.58	26.20	-24.96	2.7	-1.83	3.07	3.07	25.47
140.00	0	0	0	0	-3.325	51.611	5.060	34.72	35.54	-33.89	2.5	-2.18	3.83	3.83	34.59
160.00	0	0	0	0	-3.325	56.527	5.927	3.96	4.06	-3.85	2.0	-0.17	0.38	0.38	3.95
180.00	0	0	0	0	-4.337	64.478	7.518	34.72	35.54	-33.89	2.5	-2.18	3.83	3.83	34.59
200.00	0	0	0	0	-4.915	71.418	11.276	39.29	40.32	-38.25	2.4	-2.30	4.37	4.37	39.15
220.00	0	0	0	0	-3.903	66.795	0.723	42.87	44.32	-41.43	2.5	-2.34	5.23	5.23	42.70
240.00	0	0	0	0	-0.578	57.394	6.217	5.20	5.30	-5.09	2.8	-0.40	0.60	0.60	5.17
260.00	0	0	0	0	-4.337	64.478	7.518	43.62	44.96	-42.27	2.7	-2.72	5.40	5.40	43.43
280.00	0	0	0	0	-4.337	64.478	7.518	48.59	50.86	-46.32	2.7	-2.29	6.83	6.83	48.38
300.00	0	0	0	0	-4.915	71.418	11.276	52.86	57.40	-48.31	3.4	-1.68	10.77	10.77	52.49
320.00	0	0	0	0	-0.434	6.361	0.723	4.80	5.01	-4.60	2.7	-0.24	0.65	0.65	4.78
340.00	0	0	0	0	-4.915	70.261	9.397	52.61	55.81	-49.41	3.0	-2.30	8.71	8.71	52.32
360.00	0	0	0	0	-17.348	51.611	4.915	45.30	36.42	-54.18	5.4	-17.44	-0.32	-0.32	44.48
380.00	0	0	0	0	-6.072	-11.421	-1.590	6.09	0.61	-11.56	81.8	-7.20	-3.75	-3.75	-5.84

CALC	STICKLAND	7/12/62	REVISED	DATE
CHECK	UP-02-2			
APR	SHIMONO	7/31/62		
APR				
CONTRACT NO.				
TITLE-CORRUGATED SHEAR WEB PANEL				
EWA NO. 05652				
SPEC NO. 0103				
COND NO. 01				
RUN 01				
THE BOEING COMPANY				
PAGE				
D2-80081				
EWA				
5-652				
FIG. 137				

STRESS

ROSETTE NO. 7

LOAD	ROOM TEMP	B-C		B-C		B-C		B-C		1000'S OF PSI		1000'S OF PSI		1000'S OF PSI		1000'S OF PSI	
		SA	SB	SC	TX-F	FX	FN	TH	FA	FC	TC	FA	FC	TC	FA	FC	TC
0	0	-0.	-0.	-0.	0.	-0.	-0.	-0.0	-0.	-0.	0.	-0.	-0.	0.	-0.	-0.	0.
10.00	0	0.723	3.759	0.	2.63	3.14	-2.11	-3.0	0.79	0.24	2.61	0.79	0.24	2.61	0.79	0.24	2.61
40.00	0	-0.	17.059	0.434	12.96	13.27	-12.65	0.4	0.14	0.48	12.96	0.14	0.48	12.96	0.14	0.48	12.96
60.00	0	-1.301	27.035	3.470	20.05	21.59	-18.50	2.6	-0.29	3.38	19.96	-0.29	3.38	19.96	-0.29	3.38	19.96
10.00	0	0.434	3.903	0.867	2.51	3.44	-1.58	1.9	0.76	1.10	2.50	0.76	1.10	2.50	0.76	1.10	2.50
60.00	0	-1.301	26.745	3.614	19.77	21.43	-18.12	2.7	-0.24	3.54	19.68	-0.24	3.54	19.68	-0.24	3.54	19.68
80.00	0	-2.024	37.154	5.927	27.25	30.04	-24.46	3.2	-0.27	5.85	27.08	-0.27	5.85	27.08	-0.27	5.85	27.08
10.00	0	-0.	4.048	1.446	2.62	3.65	-1.58	6.1	0.48	1.59	2.56	0.48	1.59	2.56	0.48	1.59	2.56
80.00	0	-2.169	37.010	6.072	27.15	29.94	-24.37	3.4	-0.38	5.96	26.97	-0.38	5.96	26.97	-0.38	5.96	26.97
90.00	0	-2.602	41.925	6.506	30.95	33.74	-28.16	3.2	-0.72	6.29	30.75	-0.72	6.29	30.75	-0.72	6.29	30.75
100.00	0	-2.602	45.540	7.084	33.51	36.72	-30.31	3.2	-0.52	6.93	33.31	-0.52	6.93	33.31	-0.52	6.93	33.31
10.00	0	-0.289	5.060	1.446	3.51	4.34	-2.69	5.5	0.16	1.49	3.45	0.16	1.49	3.45	0.16	1.49	3.45
100.00	0	-2.602	45.973	7.084	33.85	37.05	-30.64	3.2	-0.52	6.93	33.64	-0.52	6.93	33.64	-0.52	6.93	33.64
110.00	0	-2.747	51.756	7.662	38.13	41.64	-34.62	3.0	-0.49	7.51	37.92	-0.49	7.51	37.92	-0.49	7.51	37.92
120.00	0	-3.181	56.527	7.951	41.87	45.27	-38.46	2.9	-0.87	7.69	41.65	-0.87	7.69	41.65	-0.87	7.69	41.65
10.00	0	-0.289	4.915	1.446	3.40	4.23	-2.58	5.7	0.16	1.49	3.34	0.16	1.49	3.34	0.16	1.49	3.34
120.00	0	-2.747	55.969	7.662	41.34	44.85	-37.83	2.8	-0.49	7.51	41.15	-0.49	7.51	41.15	-0.49	7.51	41.15
130.00	0	3.181	66.358	-8.674	53.35	69.43	-57.28	-2.5	0.64	-8.48	53.16	0.64	-8.48	53.16	0.64	-8.48	53.16
0	0	2.313	3.181	-5.638	4.82	2.44	-7.10	-19.7	0.68	-5.43	3.73	0.68	-5.43	3.73	0.68	-5.43	3.73

CALC	STRESS	TIME	DATE
CHECK	07-09-2		
APR	SHIMADZU	7/9/42	
APR			
TITLE-CORRUGATED SHEAR WEB PANEL			
EWA NO. 05652 SPEC NO. 0103			
COND NO. 01 RUN 01			
THE BOEING COMPANY			
CONTRACT NO.			
EWA			
5-652			
02-60081			
FIG. 138			

ROSETTE NO. 9

LOAD	ROOM TEMP	B-C		B-C		B-C		1000'S OF PSI		1000'S OF PSI		1000'S OF PSI		TH	FA	FC	TC
		2-4	3-4	4-4	SA	SB	SC	TX-F	FX	FN	FA	FC	TC				
10.00	0	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0	-0.	-0.	0.	
10.00	0	0.145	4.048	0.578	2.84	3.36	2.84	3.36	-2.32	0.35	0.68	2.84	1.7	0.35	0.68	2.84	
40.00	0	0.145	16.336	2.891	11.45	13.62	11.45	13.62	-9.28	1.11	3.22	11.40	2.6	1.11	3.22	11.40	
60.00	0	0.867	25.155	3.614	17.66	20.86	17.66	20.86	-14.46	2.14	4.26	17.63	1.7	2.14	4.26	17.63	
10.00	0	0.145	3.614	0.723	2.46	3.08	2.46	3.08	-1.84	0.40	0.84	2.45	2.6	0.40	0.84	2.45	
60.00	0	0.723	24.866	3.470	17.55	20.54	17.55	20.54	-14.55	1.94	4.05	17.52	1.7	1.94	4.05	17.52	
80.00	0	1.301	33.251	4.193	23.49	27.41	23.49	27.41	-19.57	2.81	5.04	23.46	1.4	2.81	5.04	23.46	
10.00	0	0.145	3.903	0.723	2.68	3.30	2.68	3.30	-2.06	0.40	0.84	2.67	2.4	0.40	0.84	2.67	
80.00	0	1.590	33.107	4.193	23.26	27.39	23.26	27.39	-19.13	3.13	5.13	23.24	1.2	3.13	5.13	23.24	
90.00	0	1.735	37.588	4.626	26.49	31.03	26.49	31.03	-21.95	3.43	5.66	26.47	1.2	3.43	5.66	26.47	
100.00	0	2.024	40.913	4.915	28.82	33.78	28.82	33.78	-23.87	3.84	6.07	28.80	1.1	3.84	6.07	28.80	
10.00	0	0.145	4.626	0.867	3.18	3.90	3.18	3.90	-2.46	0.44	1.00	3.17	2.5	0.44	1.00	3.17	
100.00	0	2.313	41.202	4.915	28.93	34.09	28.93	34.09	-23.77	4.16	6.16	28.91	1.0	4.16	6.16	28.91	
110.00	0	2.747	46.262	5.205	32.54	38.22	32.54	38.22	-26.86	4.73	6.62	32.53	0.8	4.73	6.62	32.53	
120.00	0	3.181	50.599	5.494	35.60	41.79	35.60	41.79	-29.40	5.31	7.09	35.59	0.7	5.31	7.09	35.59	
10.00	0	-0.	4.337	0.867	3.02	3.64	3.02	3.64	-2.40	0.29	0.95	3.00	3.2	0.29	0.95	3.00	
120.00	0	3.036	50.021	5.349	35.26	41.25	35.26	41.25	-29.27	5.10	6.88	35.25	0.7	5.10	6.88	35.25	
130.00	0	31.805	64.045	-4.626	41.26	60.68	41.26	60.68	-21.85	33.42	5.40	38.81	-9.9	33.42	5.40	38.81	
10.00	0	1.590	4.337	-4.193	4.87	3.02	4.87	3.02	-6.73	0.37	-4.08	4.34	-13.6	0.37	-4.08	4.34	

DATE	7/12/62	REVISION	
CALC	STICKLAND		
CHECK	07-02-2		
APR	SHIMANO	7/31/62	
APR			

TITLE-CORRUGATED SHEAR WEB PANEL	
EWA NO. 05652	SPEC NO. 0103
COND. NO. 01	RUN 01
THE BOEING COMPANY	

ROSETTE NO. 13

CONTRACT NO.

FIG. 141

ROSETTE NO. 15

[illegible]

160

STRESS

ROSETTE NO. 17

B-C B-C B-C
3-7 4-7 5-7

% LOAD	ROOM TEMP	1000'S OF PSI				1000'S OF PSI				1000'S OF PSI			
		SA	SB	SC	TX-F	FX	EN	TH	FA	FC	TC		
0	0	-0.	-0.	-0.	0.	-0.	-0.	-0.0	-0.	-0.	0.		
10.00	0	-0.	1.157	-0.	0.89	0.89	-0.89	-0.0	0.	0.	0.89		
40.00	0	0.289	4.337	-9.397	7.79	1.28	-14.29	-14.3	-2.78	-10.23	6.84		
60.00	0	2.891	7.807	-10.120	10.11	4.95	-15.27	-14.8	-0.16	-10.17	8.79		
10.00	0	0.578	0.867	-1.446	1.27	0.65	-1.89	-18.9	0.16	-1.40	1.00		
60.00	0	3.036	7.951	-9.686	9.96	5.21	-14.71	-14.7	0.14	-9.64	8.67		
80.00	0	3.614	11.276	-11.710	13.18	7.40	-18.96	-13.3	0.11	-11.68	11.79		
10.00	0	0.145	1.157	-1.301	1.45	0.62	-2.27	-11.3	-0.27	-1.38	1.33		
80.00	0	2.747	11.421	-11.276	13.22	7.12	-19.31	-12.0	-0.70	-11.49	12.07		
90.00	0	3.759	12.578	-12.722	14.57	8.17	-20.98	-12.9	-0.06	-12.74	13.12		
100.00	0	4.337	13.445	-13.734	15.59	8.88	-22.30	-13.2	0.24	-13.66	13.96		
10.00	0	0.145	1.590	-1.446	1.83	0.90	-2.76	-9.8	-0.32	-1.54	1.72		
100.00	0	4.193	13.590	-13.879	15.79	8.87	-22.71	-13.1	0.03	-13.87	14.18		
110.00	0	4.771	15.035	-15.180	17.36	9.92	-24.79	-13.1	0.24	-15.11	15.57		
120.00	0	5.060	16.192	-16.626	18.85	10.59	-27.11	-13.1	0.08	-16.60	16.90		
10.00	0	0.145	1.879	-0.289	1.51	1.41	-1.61	-3.2	0.06	-0.27	1.50		
120.00	0	5.060	16.192	-16.626	18.85	10.59	-27.11	-13.1	0.08	-16.60	16.90		
130.00	0	6.650	24.577	-21.830	27.06	16.22	-37.90	-11.9	0.11	-21.80	24.74		
0	0	-0.	4.193	-0.	3.23	3.23	-3.23	-0.0	0.	0.	3.23		

CALC	REVIEWED	DATE	TITLE-CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01		SPEC NO. 0103 RUN 01		EWA 5-652	
CHECK								
APR			SHIMMOND	7/31/52				
APR								
CONTRACT NO.			THE BOEING COMPANY			D2-80081		
						PAGE		
						FIG. 143		

161

STRESS

ROSETTE NO. 19

B-C 4-8 B-C 5-8 B-C 6-8

LOAD	ROOM TEMP	1000'S OF PSI				1000'S OF PSI				1000'S OF PSI			
		SA	SB	SC	TX-F	FX	FN	TH	FA	FC	TC	FA	FC
0	0	-0.	-0.	-0.	0.	-0.	-0.	-0.	-0.	-0.	0.	-0.	-0.
10.00	0	-0.	-0.289	-0.289	0.16	-0.05	-0.36	-67.5	-0.10	-0.32	-0.11	-0.10	-0.32
40.00	0	0.578	-0.578	-1.446	0.79	0.17	-1.41	-49.1	0.16	-1.40	-0.11	0.16	-1.40
60.00	0	1.157	-1.157	-2.602	1.48	0.45	-2.52	-51.5	0.41	-2.48	-0.33	0.41	-2.48
10.00	0	-0.	-0.289	-0.289	0.16	-0.05	-0.36	-67.5	-0.10	-0.32	-0.11	-0.10	-0.32
60.00	0	1.157	-1.446	-2.891	1.62	0.38	-2.86	-53.0	0.32	-2.80	-0.44	0.32	-2.80
80.00	0	1.446	-1.446	-3.470	1.92	0.47	-3.37	-50.0	0.44	-3.34	-0.33	0.44	-3.34
10.00	0	0.289	-0.289	-0.289	0.31	0.31	-0.31	-67.5	0.22	-0.22	-0.22	0.22	-0.22
80.00	0	1.446	-1.446	-3.759	2.01	0.36	-3.67	-48.2	0.35	-3.65	-0.22	0.35	-3.65
90.00	0	1.735	-1.446	-4.337	2.34	0.48	-4.20	-46.4	0.48	-4.19	-0.11	0.48	-4.19
100.00	0	2.313	-1.446	-4.337	2.58	1.13	-4.03	-48.7	1.11	-4.00	-0.33	1.11	-4.00
10.00	0	0.578	-0.	-0.289	0.35	0.56	-0.15	-54.2	0.54	-0.13	-0.11	0.54	-0.13
100.00	0	1.735	-1.446	-4.337	2.34	0.48	-4.20	-46.4	0.48	-4.19	-0.11	0.48	-4.19
110.00	0	2.313	-1.446	-4.626	2.68	1.03	-4.33	-47.4	1.02	-4.32	-0.22	1.02	-4.32
120.00	0	2.024	-1.735	-5.494	2.89	0.41	-5.37	-45.0	0.41	-5.37	-0.00	0.41	-5.37
10.00	0	0.578	-0.	-0.	0.31	0.73	0.10	-67.5	0.64	0.19	-0.22	0.64	0.19
120.00	0	2.024	-1.735	-5.205	2.78	0.51	-5.05	-46.1	0.51	-5.05	-0.11	0.51	-5.05
130.00	0	1.157	-3.470	-6.361	2.97	-0.75	-6.68	-51.5	-0.83	-6.61	-0.67	-0.83	-6.61
-00	0	-0.	-0.578	-0.578	0.31	-0.10	-0.73	-67.5	-0.19	-0.64	-0.22	-0.19	-0.64

CALC	585 KLS	7/12/62	REVISED	DATE
CHECK	01-02-2			
APR	SHIMONO	7/31/62		
APR				
TITLE-CORRUGATED SHEAR WEB PANEL				
EWA NO. 05652 SPEC NO. 0103				
COND NO. 01 RUN 01				
THE BOEING COMPANY				
EWA				
5-652				
02-80091				
PAGE				
716. 144				

CONTRACT NO.

TEMPERATURES,
DEFLECTIONS
& LOADS

THERMOCOUPLE DATA (SEE FIG. 3 FOR LOCATIONS)

FIGURE NO.

T-01, T-02, T-03, T-04, T-05, T-06, T-07	146-149
T-08, T-09, T-10, T-11, T-12, T-13, T-14	150-153
T-15, T-16, T-17, T-18, T-19, T-20, T-21	154-157
T-22, T-23, T-24, T-25, T-26, T-27, T-28	158-161
T-30, T-31, T-32, T-33, T-34, T-35, T-36	162-165
T-37, T-38, T-39, T-40, T-41, T-42, T-43	166-169
T-44, T-45	170-173

APPROVED BY K.E. Dwyer C.I. Sheffield 7/9/62 RADIANT HEAT LAB.

DEFLECTION DATA AND LOAD (SEE FIG. 15 FOR LOCATIONS)

FIGURE NO.

D-01, D-02, *D-03, *D-04, D-05, D-06, D-07	174-177
D-08..... L-01	178-181

* D-03 & D-04 Were knocked off clip when heat shield bent.

TOLERANCES:

THERMOCOUPLES = $\pm 45^{\circ}\text{F}$

EDI'S

D-01, D-02, D-06, & D-08 = ± 0.005 inches

D-03, D-05, D-07 = ± 0.020 inches

LOAD

L-01 = ± 150 pounds

APPROVED BY Marr Cohen 6/25/62 INSTRUMENTATION LAB.

*TEMPERATURES IN $^{\circ}\text{F}$
*DEFLECTIONS IN INCHES
*LOADS IN POUNDS

CALC	STOPP	6/25/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01	EWA 5-65
CHECK						
APPD						D2-80081
APPD						
					THE BOEING COMPANY	PAGE FIG. 145

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
	-----DEGREES FAHRENHEIT-----						
.33	81.16	65.22	76.17	78.95	75.79	78.54	76.28
.87	78.46	67.95	76.17	78.95	75.79	78.54	76.28
33.27	81.16	81.56	78.90	78.95	78.53	78.54	76.28
65.67	81.16	76.15	78.90	78.95	75.79	78.54	76.28
98.07	78.46	65.22	76.17	78.95	75.79	78.54	76.28
130.47	78.46	76.15	76.17	76.21	75.79	78.54	76.28
162.87	81.16	81.56	78.90	78.95	75.79	75.79	76.28
195.27	81.16	84.20	78.90	78.95	78.53	75.79	76.28
227.67	81.16	70.69	78.90	81.62	75.79	81.23	76.28
260.07	83.81	70.69	78.90	81.62	78.53	81.23	81.68
292.47	86.46	84.20	78.90	78.95	83.88	86.52	86.93
324.87	86.46	81.56	81.58	78.95	86.52	91.81	92.19
357.27	86.46	81.56	81.58	81.62	86.52	97.10	97.44
389.67	91.75	86.83	84.21	84.25	94.46	105.0	108.0
422.07	91.75	76.15	84.21	86.88	97.10	113.0	113.2
454.47	97.05	84.20	86.84	86.88	102.4	120.9	123.7
486.87	102.3	86.83	92.10	92.14	110.3	128.8	134.2
519.27	105.0	89.46	92.10	94.77	115.6	136.8	144.7
551.67	110.3	89.46	94.73	97.40	123.6	150.0	160.4
584.07	112.9	97.36	97.37	102.7	134.1	163.1	170.9
616.47	120.9	113.1	102.6	102.7	144.7	178.9	186.6
648.87	126.2	118.4	107.9	113.2	155.3	192.1	202.2
681.27	136.8	121.0	115.8	121.1	168.4	207.8	217.9
713.67	142.1	121.0	121.1	123.7	178.9	223.6	236.2
746.07	152.6	136.8	128.9	136.8	192.1	239.4	254.5
778.47	165.8	144.7	139.5	144.7	205.2	257.8	270.1
810.87	176.3	155.2	144.7	150.0	221.0	281.5	291.4
843.27	186.8	178.8	157.8	165.7	239.4	297.8	315.8
875.67	202.6	186.6	170.9	176.1	257.8	327.8	337.5
908.07	215.8	202.3	181.4	189.2	278.8	357.8	364.6
940.47	231.6	212.8	194.5	202.3	300.6	390.6	391.7
972.87	250.0	233.7	212.8	218.0	325.1	417.2	418.1
1005.27	265.8	246.8	223.2	238.9	352.4	454.1	446.9
1037.67	281.6	270.3	244.2	257.2	379.7	483.0	478.3
1070.07	306.2	302.5	265.1	272.8	404.1	509.3	501.8
1102.80	546.6	557.4	559.9	570.2	604.1	648.8	653.5
1135.20	554.5	567.9	570.4	578.0	614.6	662.0	666.5
1167.60	565.0	578.3	578.3	585.9	627.7	677.7	682.2
1200.00	570.3	575.7	583.5	596.3	643.5	698.8	703.1
1232.40	578.2	591.4	594.0	612.0	664.6	725.1	729.3

CALC	06/11/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				D2-80081
APR	SHIMONO 6/20/62				PAGE
APR	Clober 6/22/72				F/G. 146
CONTRACT NO.					

16159

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TIME SEC.	3-2	4-2	7-2	8-2	3-3	4-3	7-3
	T-01	T-02	T-03	T-04	T-05	T-06	T-07
	-----DEGREES FAHRENHEIT-----						
1264.80	594.0	612.4	609.7	622.5	685.6	748.8	750.2
1297.20	601.9	609.8	620.2	635.6	704.1	769.3	773.1
1329.60	615.1	625.5	635.9	656.5	725.1	794.9	795.9
1362.00	638.8	646.4	654.2	672.2	751.4	820.4	821.3
1394.40	651.9	664.8	669.9	695.8	774.4	846.0	846.8
1426.80	670.4	696.2	693.5	716.7	800.0	869.0	869.6
1459.20	686.2	701.4	711.8	742.9	823.0	897.1	900.1
1491.60	709.9	730.2	735.4	766.0	851.1	925.3	925.5
1524.00	733.6	758.8	761.2	791.4	884.4	956.0	956.0
1525.62	733.6	753.7	761.2	791.4	884.4	956.0	956.0
2065.62	967.0	977.7	995.3	1010.	1031.	1064.	1058.
2071.02	969.6	982.8	997.9	1010.	1033.	1062.	1058.
2103.42	974.7	987.8	1000.	1018.	1041.	1072.	1066.
2135.82	982.4	990.4	1008.	1026.	1054.	1085.	1082.
2168.22	992.6	1003.	1021.	1041.	1072.	1108.	1105.
2200.62	1008.	1021.	1031.	1051.	1093.	1129.	1125.
2233.02	1021.	1029.	1044.	1069.	1103.	1144.	1138.
2265.42	1042.	1050.	1062.	1087.	1126.	1163.	1159.
2297.82	1055.	1065.	1080.	1100.	1137.	1176.	1169.
2321.04	1068.	1083.	1091.	1111.	1147.	1181.	1174.
2861.04	1226.	1207.	1222.	1232.	1238.	1258.	1241.
3401.04	1286.	1253.	1268.	1270.	1274.	1287.	1275.
3941.04	1309.	1266.	1284.	1288.	1292.	1310.	1293.
4481.04	1317.	1274.	1294.	1304.	1302.	1313.	1298.
4990.80	1270.	1243.	1268.	1286.	1292.	1310.	1293.
5007.00	1270.	1238.	1268.	1286.	1292.	1305.	1293.
5023.20	1275.	1245.	1271.	1288.	1295.	1305.	1293.
5039.40	1273.	1238.	1268.	1286.	1292.	1310.	1293.
5055.60	1275.	1235.	1268.	1286.	1292.	1308.	1293.
5071.80	1275.	1243.	1268.	1294.	1295.	1310.	1295.
5088.00	1275.	1240.	1271.	1288.	1295.	1310.	1293.
5104.20	1273.	1238.	1268.	1288.	1292.	1308.	1293.
5120.40	1275.	1238.	1266.	1286.	1292.	1310.	1293.
5136.60	1273.	1235.	1268.	1288.	1292.	1305.	1293.
5152.80	1273.	1243.	1268.	1281.	1290.	1310.	1293.
5169.00	1273.	1238.	1266.	1286.	1290.	1305.	1293.
5185.20	1275.	1238.	1268.	1288.	1292.	1305.	1293.
5201.40	1275.	1245.	1268.	1286.	1292.	1305.	1293.
5217.60	1273.	1235.	1266.	1283.	1290.	1305.	1293.
5233.80	1273.	1233.	1263.	1283.	1287.	1305.	1293.

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	EGBERT 6/18/42				5-652
APR	SHIMOND 6/20/62				D2-80081
APR	Charles 6/20/2				
CONTRACT NO.					PAGE
					FIG. 147

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TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
5250.00	1273.	1233.	1266.	1283.	1290.	1305.	1293.
5266.20	1270.	1235.	1263.	1283.	1290.	1305.	1293.
5282.40	1270.	1235.	1263.	1283.	1290.	1305.	1293.
5298.60	1273.	1238.	1266.	1286.	1290.	1308.	1293.
5314.80	1273.	1240.	1266.	1283.	1292.	1308.	1293.
5331.00	1270.	1233.	1266.	1283.	1290.	1308.	1290.
5347.20	1270.	1233.	1263.	1286.	1290.	1305.	1293.
5363.40	1273.	1235.	1266.	1283.	1290.	1305.	1293.
5379.60	1270.	1233.	1263.	1283.	1290.	1302.	1293.
5395.80	1270.	1230.	1263.	1283.	1290.	1302.	1293.
5411.46	1273.	1238.	1266.	1283.	1292.	1305.	1293.
5427.66	1270.	1230.	1263.	1281.	1287.	1305.	1293.
5443.32	1270.	1240.	1263.	1283.	1290.	1302.	1293.
5459.52	1273.	1238.	1263.	1286.	1292.	1302.	1293.
5475.18	1267.	1233.	1261.	1281.	1287.	1302.	1293.
5490.84	1270.	1235.	1263.	1281.	1290.	1302.	1293.
5506.50	1267.	1233.	1261.	1283.	1287.	1305.	1293.
5522.70	1270.	1233.	1261.	1286.	1287.	1305.	1293.
5538.36	1267.	1230.	1261.	1278.	1290.	1305.	1293.
5554.02	1273.	1233.	1263.	1281.	1290.	1305.	1293.
5570.22	1270.	1230.	1261.	1283.	1287.	1302.	1293.
5586.42	1270.	1227.	1261.	1281.	1287.	1302.	1293.
5602.62	1270.	1230.	1263.	1283.	1287.	1302.	1293.
5618.82	1270.	1233.	1261.	1281.	1290.	1305.	1285.
5635.02	1270.	1235.	1263.	1278.	1290.	1302.	1293.
5651.22	1275.	1243.	1266.	1281.	1290.	1302.	1293.
5667.42	1270.	1230.	1263.	1283.	1287.	1308.	1293.
5683.62	1270.	1233.	1263.	1283.	1287.	1302.	1293.
5699.82	1273.	1240.	1266.	1283.	1287.	1300.	1287.
5716.02	1270.	1233.	1263.	1281.	1287.	1300.	1287.
5732.22	1267.	1235.	1258.	1281.	1284.	1300.	1285.
5748.42	1267.	1230.	1258.	1278.	1284.	1300.	1287.
5764.62	1265.	1233.	1261.	1281.	1284.	1300.	1285.
5780.82	1267.	1233.	1258.	1278.	1284.	1300.	1285.
5797.02	1265.	1227.	1258.	1278.	1284.	1300.	1285.
5813.22	1265.	1233.	1258.	1281.	1284.	1300.	1285.
5829.42	1267.	1233.	1261.	1278.	1284.	1300.	1287.
5845.62	1267.	1230.	1261.	1278.	1284.	1295.	1282.
5861.82	1262.	1230.	1256.	1278.	1279.	1295.	1282.
5878.02	1265.	1233.	1258.	1278.	1279.	1300.	1280.
CALC	06/11/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/18/62					
APR	SHIMONO	6/29/62					
APR	Choban	6/29/62					
CONTRACT NO.					PAGE 31 FIG. 148		

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
	-----DEGREES FAHRENHEIT-----						
5890.98	1267.	1238.	1258.	1276.	1284.	1300.	1282.

CALC	06/11/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				DZ-8000
APR	SHIMONO 6/20/62				PAGE
APR	Chobes 6/20/62				FIG. 149
CONTRACT NO.					

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TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
	-----DEGREES FAHRENHEIT-----						
.33	76.46	75.89	78.50	76.03	76.12	75.62	76.12
.87	76.46	75.89	73.00	76.03	76.12	75.62	76.12
33.27	76.46	75.89	78.50	76.03	76.12	75.62	76.12
65.67	76.46	75.89	78.50	76.03	76.12	75.62	78.86
98.07	79.19	75.89	78.50	76.03	73.38	75.62	76.12
130.47	76.46	75.89	75.75	76.03	76.12	72.87	76.12
162.87	79.19	75.89	78.50	76.03	76.12	75.62	73.38
195.27	79.19	75.89	78.50	76.03	73.38	75.62	78.86
227.67	79.19	75.89	78.50	76.03	78.86	75.62	76.12
260.07	84.46	78.64	81.21	76.03	76.12	75.62	76.12
292.47	84.46	78.64	78.50	76.03	76.12	75.62	78.86
324.87	89.70	78.64	78.50	78.77	78.86	78.37	81.53
357.27	94.95	81.33	81.21	78.77	81.53	78.37	81.53
389.67	102.8	83.97	83.85	81.45	84.17	81.09	84.17
422.07	110.7	83.97	86.50	84.09	86.80	83.74	86.80
454.47	115.9	86.61	86.50	86.72	86.80	83.74	92.07
486.87	123.8	91.89	89.14	89.36	92.07	89.04	94.70
519.27	134.3	97.18	97.08	92.00	97.33	91.69	94.70
551.67	142.1	99.82	102.4	97.27	97.33	96.99	99.97
584.07	160.4	105.1	105.0	102.5	105.2	102.3	105.2
616.47	165.6	113.0	107.7	107.8	110.5	107.6	113.1
648.87	181.3	120.9	113.0	113.1	115.8	112.9	118.4
681.27	196.9	126.2	123.5	121.0	123.7	120.8	128.9
713.67	212.5	136.8	136.8	128.9	131.6	128.8	136.8
746.07	228.2	144.7	139.4	136.8	139.5	136.7	144.7
778.47	246.4	155.2	152.6	144.7	147.4	147.3	160.5
810.87	262.0	168.4	165.8	155.2	163.1	160.5	168.3
843.27	283.0	181.5	176.3	165.7	170.9	168.4	181.4
875.67	301.9	192.0	186.8	178.8	186.6	181.6	197.1
908.07	326.2	207.7	197.3	189.3	191.9	194.8	202.3
940.47	347.9	223.5	215.7	205.0	207.6	210.6	223.3
972.87	374.9	241.9	234.1	218.1	220.7	223.8	244.2
1005.27	399.2	260.2	247.3	233.8	233.7	242.2	259.9
1037.67	425.3	278.6	265.7	254.8	254.7	260.6	278.2
1070.07	446.2	300.3	287.0	270.5	267.8	279.1	299.9
1102.80	649.7	608.7	601.6	571.2	565.4	576.0	604.7
1135.20	662.7	627.1	612.1	579.0	573.3	586.6	612.6
1167.60	675.8	627.1	620.0	589.5	583.8	594.5	623.1
1200.00	699.2	640.2	633.2	600.0	591.6	607.7	636.2
1232.40	720.1	656.0	646.4	613.1	607.3	620.9	646.7
CALC	06/11/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT	6/18/62			EWA NO. 05652 SPEC. 0201		
APR	SHIMONO	6/24/62			COND. NO. 01 RUN 01		
APR	Cloher	6/20/2			THE BOEING COMPANY		
CONTRACT NO.					PAGE		
					FIG. 150		

U6 5553 7450

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TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
1264.80	741.0	671.8	659.5	626.3	620.4	636.7	662.4
1297.20	764.0	690.2	680.6	644.6	636.2	652.5	678.1
1329.60	784.3	708.6	696.4	663.0	654.5	668.3	699.1
1362.00	809.7	732.2	717.5	681.3	670.2	689.4	722.6
1394.40	829.9	753.1	741.2	699.7	691.2	707.9	741.0
1426.80	860.4	776.1	764.4	723.3	706.9	729.0	764.1
1459.20	890.8	801.7	784.9	746.9	733.1	755.2	792.2
1491.60	916.1	829.7	815.6	772.5	759.1	778.3	817.6
1524.00	946.5	857.8	846.3	798.0	784.5	803.9	843.1
1525.62	944.0	860.4	846.3	800.5	784.5	809.0	843.1
2065.62	1077.	1073.	1070.	1038.	1022.	1043.	1065.
2071.02	1072.	1073.	1078.	1038.	1024.	1043.	1068.
2103.42	1082.	1078.	1075.	1043.	1024.	1045.	1073.
2135.82	1097.	1086.	1083.	1051.	1029.	1053.	1086.
2168.22	1115.	1102.	1096.	1061.	1042.	1064.	1094.
2200.62	1136.	1112.	1109.	1074.	1055.	1077.	1104.
2233.02	1149.	1128.	1127.	1090.	1065.	1090.	1117.
2265.42	1167.	1143.	1137.	1103.	1078.	1100.	1132.
2297.82	1179.	1159.	1155.	1118.	1091.	1113.	1145.
2321.04	1187.	1169.	1166.	1126.	1102.	1123.	1156.
2861.04	1262.	1265.	1262.	1237.	1202.	1230.	1256.
3401.04	1290.	1298.	1300.	1265.	1238.	1258.	1287.
3941.04	1310.	1316.	1319.	1289.	1256.	1274.	1300.
4481.04	1318.	1324.	1324.	1296.	1264.	1287.	1308.
4990.80	1313.	1319.	1319.	1291.	1259.	1284.	1308.
5007.00	1313.	1316.	1319.	1296.	1261.	1284.	1308.
5023.20	1310.	1319.	1321.	1291.	1259.	1284.	1310.
5039.40	1313.	1319.	1321.	1296.	1261.	1287.	1308.
5055.60	1313.	1319.	1321.	1291.	1259.	1284.	1308.
5071.80	1313.	1319.	1321.	1291.	1259.	1287.	1308.
5088.00	1313.	1319.	1319.	1296.	1261.	1287.	1310.
5104.20	1313.	1319.	1321.	1296.	1259.	1287.	1308.
5120.40	1310.	1322.	1321.	1296.	1259.	1287.	1308.
5136.60	1308.	1319.	1321.	1296.	1256.	1287.	1308.
5152.80	1310.	1322.	1321.	1296.	1259.	1284.	1310.
5169.00	1313.	1322.	1321.	1296.	1261.	1284.	1308.
5185.20	1310.	1322.	1321.	1291.	1259.	1282.	1310.
5201.40	1310.	1319.	1321.	1291.	1259.	1282.	1308.
5217.60	1308.	1319.	1321.	1296.	1259.	1284.	1308.
5233.80	1310.	1319.	1321.	1296.	1259.	1284.	1308.
CALC	06/11/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		EWA
CHECK	EGBERT	6/18/62					5-652
APR	SHIMONO	6/29/62					DZ-80021
APR	Choben	6/20/2					PAGE
CONTRACT NO.							FIG. 151

U6 55337450

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TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
5250.00	1308.	1319.	1319.	1291.	1259.	1282.	1308.
5266.20	1310.	1319.	1319.	1296.	1259.	1282.	1308.
5282.40	1310.	1319.	1321.	1291.	1256.	1282.	1308.
5298.60	1310.	1316.	1321.	1291.	1259.	1282.	1308.
5314.80	1310.	1319.	1321.	1291.	1259.	1282.	1308.
5331.00	1310.	1319.	1319.	1291.	1259.	1282.	1308.
5347.20	1308.	1319.	1319.	1291.	1259.	1284.	1308.
5363.40	1308.	1319.	1321.	1291.	1259.	1284.	1305.
5379.60	1310.	1316.	1321.	1291.	1259.	1282.	1308.
5395.80	1308.	1319.	1319.	1291.	1259.	1282.	1308.
5411.46	1310.	1319.	1319.	1291.	1256.	1282.	1308.
5427.66	1308.	1316.	1321.	1291.	1259.	1284.	1308.
5443.32	1310.	1319.	1324.	1291.	1256.	1282.	1308.
5459.52	1310.	1316.	1319.	1289.	1259.	1282.	1305.
5475.18	1305.	1316.	1319.	1291.	1256.	1282.	1308.
5490.84	1310.	1316.	1321.	1291.	1259.	1282.	1308.
5506.50	1310.	1319.	1319.	1291.	1256.	1282.	1305.
5522.70	1308.	1319.	1316.	1291.	1259.	1279.	1305.
5538.36	1310.	1316.	1319.	1291.	1259.	1282.	1305.
5554.02	1308.	1316.	1319.	1294.	1256.	1282.	1308.
5570.22	1308.	1316.	1319.	1289.	1256.	1282.	1305.
5586.42	1308.	1316.	1329.	1291.	1256.	1284.	1305.
5602.62	1308.	1319.	1319.	1291.	1256.	1279.	1305.
5618.82	1308.	1311.	1319.	1289.	1256.	1279.	1305.
5635.02	1308.	1316.	1321.	1289.	1254.	1279.	1308.
5651.22	1308.	1316.	1321.	1289.	1254.	1279.	1305.
5667.42	1308.	1316.	1319.	1289.	1256.	1279.	1305.
5683.62	1308.	1316.	1319.	1291.	1254.	1279.	1305.
5699.82	1301.	1316.	1319.	1289.	1256.	1279.	1305.
5716.02	1305.	1314.	1319.	1289.	1256.	1279.	1305.
5732.22	1303.	1314.	1313.	1289.	1254.	1279.	1305.
5748.42	1308.	1314.	1313.	1289.	1254.	1279.	1305.
5764.62	1308.	1314.	1316.	1286.	1254.	1276.	1303.
5780.82	1308.	1314.	1316.	1289.	1254.	1276.	1300.
5797.02	1300.	1314.	1316.	1286.	1254.	1276.	1305.
5813.22	1303.	1314.	1313.	1286.	1254.	1276.	1305.
5829.42	1300.	1314.	1313.	1286.	1254.	1276.	1303.
5845.62	1300.	1311.	1316.	1286.	1249.	1276.	1305.
5861.82	1303.	1311.	1313.	1283.	1254.	1276.	1300.
5878.02	1292.	1311.	1311.	1283.	1251.	1274.	1300.
CALC	06/11/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/18/2					
APR	SHIMONO	6/20/2					
APR	Clova	6/20/2					
CONTRACT NO.					EWA 5-652 D2-80081 PAGE FIG. 152		

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2-5000

TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
	-----DEGREES FAHRENHEIT-----						
5890.98	1051.	1311.	1313.	1283.	1249.	1274.	1300.

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/67				
APR	SHIMOND 6/20/67				
APR	Chaves 6/24/7				
CONTRACT NO.					PART FIG. 153

U6 5553 7450

2-5000

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
	-----DEGREES FAHRENHEIT-----						
.33	76.19	76.06	75.73	75.80	73.46	76.37	75.90
.87	76.19	78.79	75.73	75.80	73.46	76.37	73.15
33.27	76.19	76.06	75.73	78.55	76.19	79.10	75.90
65.67	57.06	76.06	75.73	78.55	73.46	73.64	75.90
98.07	76.19	78.79	75.73	78.55	73.46	76.37	73.15
130.47	76.19	76.06	75.73	75.80	73.46	76.37	73.15
162.87	76.19	78.79	75.73	78.55	76.19	76.37	75.90
195.27	78.93	81.47	75.73	78.55	73.46	76.37	75.90
227.67	78.93	76.06	75.73	78.55	76.19	76.37	75.90
260.07	81.60	84.11	75.73	78.55	73.46	79.10	78.64
292.47	89.49	89.38	75.73	78.55	76.19	84.38	83.97
324.87	70.73	97.29	78.48	78.55	76.19	92.26	89.26
357.27		102.6	78.48	83.89	76.19	97.51	94.54
389.67	113.2	113.1	81.19	81.25	78.93	102.8	102.5
422.07	121.1	118.4	81.19	86.54	78.93	113.3	107.7
454.47	131.6	131.6	83.83	86.54	78.93	118.5	113.0
486.87	142.1	142.1	83.83	89.18	81.60	123.8	118.3
519.27	157.8	155.2	86.48	97.11	84.23	134.3	128.9
551.67	170.9	168.3	89.13	97.11	86.86	139.5	136.8
584.07	186.6	184.1	94.42	99.76	92.12	155.2	150.0
616.47	202.3	199.8	97.07	107.7	94.75	168.3	163.1
648.87	218.0	218.1	105.0	113.0	97.38	181.3	176.2
681.27	236.3	236.4	110.3	113.0	100.0	197.0	189.4
713.67	254.6	254.8	115.6	126.2	107.9	212.6	205.1
746.07	272.9	275.7	123.5	136.8	113.2	225.6	215.6
778.47	291.6	294.6	131.5	142.1	118.4	241.3	228.7
810.87	313.3	319.0	139.4	160.5	123.7	254.3	244.5
843.27	335.0	340.8	152.6	173.7	134.2	275.2	265.5
875.67	359.4	365.2	165.8	186.8	139.5	296.7	284.0
908.07	383.8	392.4	176.3	202.6	152.6	321.0	308.5
940.47	413.2	418.9	192.1	215.7	163.1	348.1	333.0
972.87	436.8	447.8	207.9	234.1	173.5	375.2	363.0
1005.27	470.8	479.2	223.6	255.1	186.6	410.0	392.9
1037.67	497.0	505.5	242.1	276.1	199.7	433.5	419.5
1070.07	523.1	531.7	263.1	295.1	215.4	457.0	443.1
1102.80	664.5	662.8	580.7	577.7	497.0	605.9	613.9
1135.20	677.6	673.3	585.9	580.3	507.4	618.9	624.4
1167.60	695.9	694.3	593.8	588.2	515.3	637.2	640.2
1200.00	716.9	717.9	604.4	604.0	525.8	655.5	661.2
1232.40	740.4	736.2	614.9	614.5	536.2	679.0	682.3

CALC	06/11/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				D2-80081
APR	SHIMONO 6/20/62				
APR	Clohes 7/24/72				
CONTRACT NO.					PAGE FIG. 154

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TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
1264.80	766.1	769.8	630.7	625.0	549.3	705.1	708.5
1297.20	786.5	787.6	643.9	638.2	557.2	720.8	732.2
1329.60	811.9	810.5	659.7	656.6	572.9	744.3	755.7
1362.00	837.4	836.0	680.7	675.0	586.0	767.3	783.8
1394.40	862.8	858.9	699.2	693.4	601.7	792.7	801.6
1426.80	888.2	887.0	717.6	717.1	620.0	815.5	824.6
1459.20	918.8	917.6	741.3	735.5	638.3	848.5	850.2
1491.60	944.2	945.6	764.6	758.9	656.7	873.9	880.8
1524.00	974.7	976.2	792.7	784.5	680.2	904.3	906.3
1525.62	979.8	976.2	795.3	784.5	682.8	906.9	911.4
2065.62	1075.	1074.	1021.	1004.	941.7	1029.	1022.
2071.02	1075.	1074.	1018.	1002.	941.7	1026.	1022.
2103.42	1080.	1084.	1026.	1012.	951.8	1034.	1029.
2135.82	1101.	1100.	1034.	1017.	962.0	1050.	1045.
2168.22	1124.	1120.	1041.	1033.	974.7	1070.	1068.
2200.62	1144.	1146.	1054.	1041.	987.4	1091.	1086.
2233.02	1157.	1159.	1067.	1056.	997.6	1104.	1099.
2265.42	1178.	1182.	1083.	1072.	1013.	1124.	1120.
2297.82	1191.	1193.	1101.	1087.	1029.	1137.	1133.
2321.04	1193.	1198.	1109.	1100.	1041.	1142.	1140.
2861.04	1258.	1268.	1236.	1235.	1211.	1230.	1228.
3401.04	1286.	1296.	1275.	1274.	1286.	1266.	1265.
3941.04	1304.	1311.	1288.	1287.	1322.	1284.	1283.
4481.04	1307.	1319.	1301.	1300.	1338.	1294.	1296.
4990.80	1304.	1311.	1285.	1271.	1309.	1286.	1288.
5007.00	1299.	1311.	1285.	1271.	1309.	1286.	1288.
5023.20	1304.	1311.	1285.	1271.	1309.	1284.	1285.
5039.40	1304.	1311.	1285.	1269.	1309.	1291.	1285.
5055.60	1304.	1311.	1285.	1269.	1309.	1286.	1285.
5071.80	1304.	1311.	1285.	1274.	1309.	1286.	1285.
5088.00	1304.	1314.	1288.	1274.	1309.	1286.	1288.
5104.20	1304.	1311.	1285.	1269.	1307.	1286.	1285.
5120.40	1304.	1311.	1285.	1274.	1307.	1286.	1285.
5136.60	1304.	1309.	1285.	1274.	1304.	1286.	1285.
5152.80	1304.	1311.	1285.	1271.	1307.	1286.	1285.
5169.00	1304.	1311.	1285.	1271.	1307.	1284.	1285.
5185.20	1302.	1311.	1285.	1274.	1307.	1284.	1285.
5201.40	1302.	1306.	1285.	1274.	1304.	1284.	1285.
5217.60	1304.	1306.	1285.	1274.	1304.	1286.	1283.
5233.80	1302.	1314.	1285.	1271.	1304.	1284.	1285.
CALC	06/11/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/18/72					
APR	SHIMONO	6/20/72					
APR	Okabe	6/21/72					
CONTRACT NO.					PAGE		
					FIG. 155		

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PIONEER BUSINESS FORMS

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
5250.00	1299.	1311.	1283.	1271.	1304.	1286.	1285.
5266.20	1299.	1309.	1285.	1269.	1304.	1286.	1285.
5282.40	1304.	1311.	1285.	1271.	1304.	1284.	1288.
5298.60	1299.	1309.	1285.	1271.	1304.	1284.	1285.
5314.80	1304.	1309.	1285.	1271.	1304.	1286.	1285.
5331.00	1304.	1309.	1285.	1271.	1302.	1286.	1285.
5347.20	1304.	1309.	1283.	1271.	1304.	1284.	1285.
5363.40	1304.	1309.	1285.	1271.	1304.	1284.	1285.
5379.60	1302.	1309.	1285.	1271.	1302.	1281.	1285.
5395.80	1304.	1309.	1285.	1271.	1302.	1284.	1285.
5411.46	1302.	1309.	1285.	1271.	1304.	1284.	1283.
5427.66	1304.	1309.	1280.	1271.	1302.	1284.	1283.
5443.32	1302.	1309.	1283.	1274.	1299.	1281.	1283.
5459.52	1299.	1309.	1283.	1276.	1304.	1284.	1285.
5475.18	1302.	1309.	1283.	1271.	1302.	1284.	1283.
5490.84	1302.	1309.	1280.	1269.	1299.	1281.	1283.
5506.50	1302.	1306.	1283.	1271.	1299.	1284.	1285.
5522.70	1296.	1309.	1283.	1274.	1299.	1284.	1285.
5538.36	1299.	1306.	1280.	1271.	1296.	1284.	1285.
5554.02	1302.	1309.	1283.	1274.	1299.	1286.	1285.
5570.22	1302.	1306.	1283.	1269.	1296.	1281.	1283.
5586.42	1299.	1306.	1280.	1271.	1296.	1284.	1283.
5602.62	1299.	1306.	1280.	1271.	1296.	1284.	1285.
5618.82	1299.	1306.	1280.	1271.	1296.	1284.	1285.
5635.02	1299.	1309.	1280.	1271.	1296.	1281.	1285.
5651.22	1299.	1309.	1283.	1271.	1296.	1281.	1285.
5667.42	1299.	1306.	1285.	1271.	1296.	1284.	1283.
5683.62	1296.	1306.	1283.	1274.	1299.	1281.	1285.
5699.82	1299.	1306.	1283.	1269.	1296.	1281.	1283.
5716.02	1299.	1306.	1283.	1271.	1296.	1284.	1283.
5732.22	1294.	1304.	1277.	1269.	1294.	1281.	1283.
5748.42	1294.	1304.	1277.	1269.	1296.	1281.	1283.
5764.62	1294.	1301.	1277.	1269.	1294.	1281.	1283.
5780.82	1294.	1304.	1277.	1266.	1294.	1281.	1283.
5797.02	1296.	1306.	1277.	1269.	1294.	1281.	1283.
5813.22	1294.	1301.	1277.	1271.	1294.	1278.	1283.
5829.42	1294.	1309.	1277.	1266.	1296.	1278.	1283.
5845.62	1294.	1304.	1277.	1271.	1294.	1278.	1280.
5861.82	1289.	1301.	1275.	1266.	1294.	1278.	1084.
5878.02	1294.	1298.	1272.	1266.	1294.	1276.	794.0
CALC	06/11/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/18/72					
APR	SHIMONO	6/20/72					
APR	Cholua	6/20/72					
CONTRACT NO.					PAGE		
					FIG. 156		

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
5890.98	1294.	1304.	1275.	1266.	1294.	1278.	980.4

CALC	06/11/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				D2-80081
APR	SHIMONO 6/20/62				
APR	Chabon 6/20/62				
CONTRACT NO.					PAGE FIG. 157

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TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
.33	75.92	78.74	81.49	78.46	78.48	75.99	76.12
.87	73.17	78.74	81.49	78.46	75.73	73.25	76.12
33.27	75.92	78.74	84.12	78.46	78.48	75.99	76.12
65.67	78.66	78.74	81.49	78.46	78.48	75.99	76.12
98.07	78.66	76.00	81.49	78.46	72.98	73.25	76.12
130.47	75.92	76.00	81.49	78.46	75.73	75.99	76.12
162.87	73.17	76.00	81.49	75.71	75.73	73.25	76.12
195.27	75.92	78.74	81.49	78.46	78.48	75.99	73.38
227.67	78.66	76.00	84.12	81.17	78.48	75.99	76.12
260.07	73.17	78.74	86.76	83.82	75.73	75.99	76.12
292.47	78.66	78.74	94.66	91.76	81.19	78.73	76.12
324.87	78.66	78.74	102.6	97.05	81.19	78.73	78.86
357.27	78.66	81.43	110.5	107.6	83.83	78.73	78.86
389.67	83.99	84.07	121.0	115.6	86.48	81.41	78.86
422.07	81.35	84.07	131.6	126.2	91.77	84.05	78.86
454.47	83.99	86.70	142.1	136.8	97.07	86.69	84.17
486.87	86.63	86.70	155.2	147.4	99.71	91.97	86.80
519.27	86.63	91.98	170.9	163.2	110.3	97.24	86.80
551.67	94.55	97.25	184.0	178.9	118.2	97.24	89.43
584.07	99.83	102.5	202.4	194.7	123.5	102.5	94.70
616.47	105.1	107.8	218.1	213.1	128.8	107.8	94.70
648.87	105.1	113.1	239.0	231.6	139.4	113.1	97.33
681.27	113.0	121.0	260.0	247.3	150.0	118.3	105.2
713.67	118.3	131.5	281.0	268.4	160.5	123.6	110.5
746.07	123.6	139.5	302.7	292.5	168.4	131.5	115.8
778.47	131.5	152.6	324.4	311.6	186.8	139.4	121.0
810.87	139.4	165.7	351.6	336.2	197.3	152.6	128.9
843.27	152.6	178.8	373.4	360.8	215.8	163.1	136.8
875.67	157.9	191.9	397.8	382.6	239.4	173.6	144.7
908.07	173.6	207.7	424.1	412.2	249.9	186.7	152.6
940.47	181.5	226.0	447.7	438.5	271.0	202.4	163.1
972.87	194.6	244.4	473.9	464.9	295.2	215.5	178.8
1005.27	213.0	265.3	505.4	496.5	319.8	228.6	186.6
1037.67	226.1	289.2	526.4	522.8	344.3	247.0	197.1
1070.07	239.2	311.0	552.6	549.2	366.2	265.3	212.8
1102.80	498.2	689.4	694.2	688.8	620.2	534.6	486.8
1135.20	506.1	697.3	709.9	704.6	630.7	542.5	497.3
1167.60	514.0	705.1	725.6	723.0	638.6	550.4	507.8
1200.00	527.1	715.6	751.8	746.7	649.1	558.3	513.0
1232.40	540.3	728.7	774.7	769.9	664.9	568.8	523.5
CALC	06/11/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/18/72					
APR	SHIMONO	6/29/72					
APR	Chobee	6/29/72					
CONTRACT NO.					PAGE		
					F16.158		

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
1264.80	558.6	744.5	797.7	792.9	680.7	576.6	534.0
1297.20	574.4	759.9	820.6	815.9	696.5	587.1	541.8
1329.60	587.5	777.8	846.1	841.5	717.6	600.3	554.9
1362.00	611.2	798.2	871.5	867.1	738.7	610.8	568.0
1394.40	629.6	821.1	897.0	892.7	756.9	626.5	583.8
1426.80	655.8	844.1	925.1	920.9	777.4	639.6	591.6
1459.20	674.2	869.6	950.5	949.0	803.0	658.0	610.0
1491.60	700.5	897.6	986.2	979.8	833.7	676.4	625.7
1524.00	726.8	928.2	1014.	1008.	861.8	692.1	641.4
1525.62	732.0	928.2	1014.	1011.	866.9	697.4	641.4
2065.62	967.4	1126.	1112.	1104.	1080.	971.8	916.9
2071.02	972.5	1126.	1107.	1104.	1080.	974.3	919.5
2103.42	980.2	1129.	1118.	1114.	1086.	982.0	929.6
2135.82	990.4	1134.	1138.	1135.	1093.	992.2	939.8
2168.22	1001.	1144.	1159.	1156.	1104.	1005.	952.6
2200.62	1014.	1157.	1182.	1179.	1119.	1018.	965.3
2233.02	1026.	1170.	1203.	1197.	1132.	1033.	980.6
2265.42	1042.	1188.	1221.	1215.	1145.	1046.	988.2
2297.82	1060.	1204.	1229.	1223.	1161.	1064.	1004.
2321.04	1065.	1217.	1231.	1228.	1174.	1075.	1014.
2861.04	1195.	1312.	1288.	1285.	1267.	1237.	1205.
3401.04	1241.	1335.	1314.	1309.	1295.	1330.	1290.
3941.04	1267.	1338.	1332.	1327.	1306.	1380.	1328.
4481.04	1285.	1351.	1337.	1332.	1319.	1395.	1341.
4990.80	1280.	1346.	1332.	1330.	1316.	1354.	1313.
5007.00	1282.	1346.	1332.	1330.	1316.	1351.	1313.
5023.20	1277.	1348.	1332.	1327.	1319.	1351.	1313.
5039.40	1277.	1348.	1334.	1330.	1319.	1351.	1310.
5055.60	1280.	1346.	1337.	1332.	1319.	1351.	1308.
5071.80	1282.	1348.	1334.	1330.	1316.	1349.	1308.
5088.00	1282.	1343.	1332.	1330.	1316.	1349.	1310.
5104.20	1282.	1343.	1332.	1330.	1316.	1349.	1305.
5120.40	1280.	1343.	1332.	1330.	1316.	1349.	1305.
5136.60	1277.	1343.	1332.	1330.	1319.	1349.	1308.
5152.80	1282.	1346.	1332.	1330.	1316.	1349.	1305.
5169.00	1277.	1346.	1332.	1330.	1316.	1346.	1305.
5185.20	1277.	1343.	1332.	1327.	1316.	1343.	1305.
5201.40	1280.	1341.	1329.	1327.	1316.	1343.	1305.
5217.60	1280.	1343.	1332.	1327.	1316.	1346.	1305.
5233.80	1277.	1343.	1332.	1327.	1319.	1349.	1303.
CALC	06/11/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		EWA
CHECK	EGRENT	6/12/72					5-652
APR	SHIMONO	6/20/72					D2-80061
APR	Cholera	6/21/72					PAGE
CONTRACT NO.							FIG. 159

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TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
5250.00	1280.	1343.	1329.	1330.	1314.	1349.	1303.
5266.20	1282.	1343.	1329.	1330.	1314.	1346.	1303.
5282.40	1280.	1341.	1332.	1327.	1314.	1346.	1300.
5298.60	1280.	1341.	1327.	1327.	1314.	1346.	1303.
5314.80	1277.	1341.	1332.	1327.	1314.	1343.	1300.
5331.00	1282.	1341.	1327.	1327.	1316.	1346.	1300.
5347.20	1277.	1341.	1332.	1330.	1314.	1343.	1300.
5363.40	1277.	1341.	1332.	1327.	1314.	1343.	1300.
5379.60	1280.	1341.	1327.	1327.	1319.	1343.	1298.
5395.80	1282.	1341.	1327.	1327.	1314.	1343.	1300.
5411.46	1280.	1341.	1332.	1327.	1314.	1341.	1300.
5427.66	1277.	1341.	1327.	1324.	1316.	1343.	1298.
5443.32	1277.	1341.	1332.	1324.	1314.	1341.	1295.
5459.52	1277.	1338.	1329.	1324.	1314.	1333.	1298.
5475.18	1277.	1341.	1327.	1327.	1314.	1343.	1298.
5490.84	1277.	1335.	1327.	1327.	1314.	1341.	1298.
5506.50	1277.	1338.	1327.	1324.	1316.	1341.	1295.
5522.70	1277.	1338.	1327.	1327.	1314.	1341.	1298.
5538.36	1277.	1338.	1332.	1327.	1314.	1341.	1298.
5554.02	1272.	1338.	1327.	1324.	1314.	1341.	1295.
5570.22	1277.	1338.	1327.	1327.	1314.	1341.	1295.
5586.42	1277.	1338.	1329.	1327.	1311.	1341.	1295.
5602.62	1280.	1338.	1329.	1327.	1311.	1338.	1295.
5618.82	1277.	1338.	1327.	1324.	1319.	1336.	1295.
5635.02	1280.	1335.	1329.	1324.	1311.	1336.	1295.
5651.22	1277.	1335.	1324.	1324.	1311.	1336.	1295.
5667.42	1275.	1338.	1329.	1327.	1314.	1336.	1295.
5683.62	1275.	1338.	1327.	1324.	1311.	1338.	1295.
5699.82	1275.	1335.	1324.	1322.	1311.	1336.	1295.
5716.02	1277.	1335.	1321.	1319.	1311.	1336.	1295.
5732.22	1275.	1335.	1321.	1322.	1311.	1336.	1295.
5748.42	1277.	1335.	1321.	1319.	1311.	1333.	1295.
5764.62	1275.	1335.	1321.	1317.	1308.	1333.	1295.
5780.82	1275.	1335.	1321.	1322.	1311.	1336.	1290.
5797.02	1272.	1335.	1321.	1319.	1306.	1310.	1290.
5813.22	1275.	1335.	1321.	1319.	1311.	1315.	1295.
5829.42	1275.	1333.	1319.	1317.	1306.	1333.	1290.
5845.62	1272.	1330.	1316.	1314.	1306.	1336.	1292.
5861.82	1272.	1333.	1316.	1314.	1306.	1258.	1295.
5878.02	1272.	1330.	1314.	1314.	1301.	1245.	1290.

CALC	06/11/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-656
CHECK	EGBERT 6/11/72				D2-80081
APR	SHIMONO 6/20/72				PAGE
APR	Cloba 6/20/72				FIG. 160
CONTRACT NO.					

U6 5553 7450

U6 5553 7450

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TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
5890.98	1275.	1328.	1321.	1317.	1303.	1325.	1290.

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				DZ-80081
APR	SHIMONO 6/20/62				
APR	Choban 6/24/62				
CONTRACT NO.					PAGE FIG. 161

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PROTECT BUSINESS FORMS

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
.33	75.97	75.78	76.08	73.93	73.13	76.01	65.20
.87	75.97	75.78	76.08	76.65	75.88	78.75	73.41
33.27	75.97	73.04	76.08	76.65	73.13	76.01	73.41
65.67	75.97	78.53	76.08	76.65	73.13	73.27	73.41
98.07	75.97	78.53	76.08	79.36	73.13	76.01	73.41
130.47	75.97	75.78	76.08	76.65	73.13	73.27	76.14
162.87	75.97	78.53	76.08	79.36	73.13	76.01	73.41
195.27	78.72	78.53	78.81	76.65	75.88	78.75	73.41
227.67	78.72	78.53	78.81	76.65	73.13	76.01	73.41
260.07	81.40	83.88	81.49	79.36	75.88	76.01	73.41
292.47	84.04	86.52	86.76	84.62	75.88	76.01	73.41
324.87	89.32	91.81	92.03	84.62	75.88	76.01	76.14
357.27	94.59	97.10	94.67	84.62	75.88	76.01	76.14
389.67	97.23	102.4	102.6	89.85	75.88	76.01	76.14
422.07	105.1	107.7	105.2	89.85	78.62	81.43	78.88
454.47	110.4	113.0	113.1	95.08	81.31	84.07	78.88
486.87	113.1	118.3	121.0	97.70	81.31	81.43	78.88
519.27	118.3	126.2	128.9	102.9	83.96	86.71	81.55
551.67	123.6	134.1	139.5	108.2	86.60	86.71	84.18
584.07	131.5	144.7	147.4	110.8	86.60	86.71	84.18
616.47	139.4	160.5	160.5	118.6	89.24	91.98	86.82
648.87	150.0	168.4	170.9	126.5	91.88	94.62	89.45
681.27	157.9	178.9	186.7	131.7	97.16	94.62	92.08
713.67	173.6	194.7	197.1	139.5	97.16	105.2	97.35
746.07	186.7	210.5	212.8	152.6	105.1	105.2	102.6
778.47	199.8	228.9	228.6	157.8	110.4	107.8	105.2
810.87	212.9	247.3	246.9	170.8	113.0	113.1	110.5
843.27	228.7	263.0	267.8	186.4	120.9	121.0	113.1
875.67	241.8	281.5	286.4	194.2	126.2	126.3	121.0
908.07	257.5	300.6	305.4	212.4	134.1	134.2	126.3
940.47	273.2	322.4	327.1	220.2	139.4	139.5	134.2
972.87	292.0	346.9	351.6	230.6	152.6	147.4	142.1
1005.27	308.3	368.8	373.3	254.0	163.1	163.1	150.0
1037.67	330.1	396.0	400.5	267.0	173.6	173.6	163.1
1070.07	357.3	427.7	426.7	282.6	184.1	178.8	170.9
1102.80	553.1	651.4	652.2	518.4	419.5	413.8	405.5
1135.20	563.6	659.3	660.0	523.6	430.0	424.3	416.0
1167.60	571.5	669.9	667.9	534.0	440.6	440.1	426.5
1200.00	582.0	675.1	678.4	544.4	448.4	450.6	434.3
1232.40	589.8	690.9	691.5	549.6	461.6	463.7	447.4
CALC	06/11/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT	6/18/72			EWA NO. 05652 SPEC. 0201		
APR	SHIMONO	6/20/72			COND. NO. 01 RUN 01		
APR	Cholera	6/20/72			THE BOEING COMPANY		
CONTRACT NO.					PAGE		
					FIG. 162		

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TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
1264.80	600.3	701.4	704.6	560.0	474.7	474.2	457.9
1297.20	610.8	717.2	717.7	573.0	485.2	487.3	468.4
1329.60	626.6	733.0	733.4	583.4	501.0	505.7	484.1
1362.00	642.3	754.0	749.2	593.6	516.8	521.4	497.2
1394.40	660.7	771.9	769.6	609.4	535.2	534.5	512.9
1426.80	681.7	789.8	790.0	622.4	551.0	552.9	531.3
1459.20	700.1	812.8	810.3	635.5	569.4	573.9	549.6
1491.60	718.5	838.4	833.3	653.7	590.4	592.3	570.5
1524.00	742.1	861.4	858.7	674.5	614.1	613.3	591.5
1525.62	744.7	866.5	861.3	671.9	614.1	615.9	591.5
2065.62	992.3	1095.	1089.	932.0	904.0	897.6	881.1
2071.02	994.9	1098.	1092.	932.0	904.0	895.1	881.1
2103.42	1003.	1108.	1099.	942.1	916.7	907.8	891.3
2135.82	1015.	1121.	1110.	952.2	927.0	920.6	904.0
2168.22	1034.	1134.	1125.	964.9	939.7	928.2	914.2
2200.62	1052.	1155.	1138.	977.5	952.5	943.5	926.9
2233.02	1070.	1168.	1154.	990.2	965.3	951.2	939.6
2265.42	1085.	1183.	1169.	1008.	980.6	963.9	954.9
2297.82	1103.	1201.	1192.	1016.	995.9	979.2	970.2
2321.04	1116.	1212.	1198.	1031.	1006.	986.9	977.8
2861.04	1323.	1419.	1404.	1218.	1149.	1134.	1124.
3401.04	1408.	1510.	1492.	1303.	1213.	1193.	1191.
3941.04	1439.	1545.	1532.	1343.	1247.	1219.	1225.
4481.04	1437.	1545.	1534.	1354.	1260.	1240.	1238.
4990.80	1372.	1473.	1461.	1303.	1257.	1235.	1238.
5007.00	1369.	1471.	1461.	1297.	1257.	1237.	1238.
5023.20	1369.	1471.	1461.	1297.	1260.	1235.	1238.
5039.40	1369.	1471.	1458.	1297.	1257.	1235.	1238.
5055.60	1367.	1468.	1453.	1297.	1257.	1235.	1238.
5071.80	1367.	1468.	1458.	1297.	1260.	1237.	1238.
5088.00	1367.	1468.	1456.	1297.	1257.	1237.	1240.
5104.20	1364.	1466.	1453.	1297.	1257.	1235.	1240.
5120.40	1364.	1468.	1453.	1297.	1257.	1237.	1238.
5136.60	1364.	1466.	1453.	1295.	1257.	1237.	1238.
5152.80	1364.	1468.	1419.	1292.	1257.	1237.	1240.
5169.00	1364.	1466.	1450.	1292.	1257.	1237.	1240.
5185.20	1362.	1466.	1450.	1297.	1260.	1240.	1243.
5201.40	1362.	1463.	1450.	1292.	1260.	1237.	1238.
5217.60	1364.	1461.	1448.	1292.	1260.	1237.	1238.
5233.80	1362.	1466.	1445.	1292.	1257.	1235.	1238.
CALC	06/11/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		EWA 5-653
CHECK	EGBERT	6/18/62					
APR	SHIMONO	5/20/62					
APR	Chosen	6/20/62					D2-80061
CONTRACT NO.							PAGE
							FIG. 163

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TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
5250.00	1359.	1463.	1445.	1287.	1257.	1237.	1238.
5266.20	1362.	1461.	1445.	1287.	1257.	1237.	1238.
5282.40	1359.	1458.	1445.	1292.	1257.	1235.	1238.
5298.60	1359.	1458.	1445.	1287.	1257.	1237.	1238.
5314.80	1359.	1458.	1445.	1290.	1257.	1235.	1238.
5331.00	1359.	1458.	1443.	1287.	1257.	1232.	1235.
5347.20	1359.	1458.	1443.	1290.	1257.	1235.	1235.
5363.40	1359.	1455.	1443.	1290.	1257.	1235.	1235.
5379.60	1359.	1455.	1440.	1290.	1257.	1235.	1235.
5395.80	1359.	1455.	1443.	1290.	1257.	1235.	1235.
5411.46	1357.	1455.	1443.	1287.	1257.	1235.	1238.
5427.66	1359.	1458.	1440.	1287.	1257.	1237.	1235.
5443.32	1357.	1455.	1440.	1287.	1257.	1235.	1238.
5459.52	1354.	1453.	1440.	1287.	1257.	1237.	1238.
5475.18	1357.	1455.	1440.	1287.	1252.	1235.	1238.
5490.84	1359.	1453.	1438.	1287.	1257.	1232.	1235.
5506.50	1354.	1455.	1438.	1287.	1257.	1237.	1238.
5522.70	1354.	1455.	1438.	1287.	1257.	1235.	1238.
5538.36	1354.	1453.	1438.	1287.	1257.	1235.	1235.
5554.02	1354.	1455.	1435.	1285.	1257.	1237.	1235.
5570.22	1354.	1453.	1440.	1287.	1257.	1232.	1235.
5586.42	1351.	1453.	1435.	1287.	1257.	1232.	1235.
5602.62	1351.	1450.	1404.	1282.	1257.	1235.	1238.
5618.82	1351.	1450.	1435.	1282.	1257.	1237.	1238.
5635.02	1351.	1453.	1435.	1282.	1257.	1232.	1233.
5651.22	1351.	1455.	1435.	1282.	1255.	1232.	1235.
5667.42	1349.	1448.	1435.	1282.	1257.	1232.	1235.
5683.62	1351.	1450.	1435.	1282.	1255.	1235.	1238.
5699.82	1351.	1453.	1435.	1282.	1257.	1235.	1238.
5716.02	1354.	1450.	1435.	1282.	1257.	1232.	1235.
5732.22	1351.	1450.	1435.	1282.	1255.	1235.	1235.
5748.42	1349.	1450.	1435.	1282.	1257.	1232.	1235.
5764.62	1349.	1448.	1432.	1279.	1252.	1232.	1235.
5780.82	1344.	1448.	1432.	1279.	1255.	1232.	1235.
5797.02	1349.	1448.	1432.	1279.	1252.	1232.	1233.
5813.22	1349.	1448.	1430.	1282.	1255.	1235.	1235.
5829.42	1346.	1448.	1432.	1277.	1255.	1229.	1233.
5845.62	1349.	1445.	1430.	1279.	1252.	1232.	1233.
5861.82	1346.	1448.	1427.	1277.	1252.	1232.	1233.
5878.02	1344.	1445.	1427.	1274.	1252.	1229.	1233.
CALC	06/11/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/11/62					
APR	SHIMONO	6/20/62					
APR	Choban	6/20/62					
CONTRACT NO.					PAGE.		
					FIG. 164		

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
	-----DEGREES FAHRENHEIT-----						
5890.98	1346.	1445.	1430.	1277.	1252.	1229.	1233.

CALC	06/11/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/10/62				D2-80081
APR	SHIMONO 6/20/62				
APR	Chobee 6/20/62				
CONTRACT NO.					PAGE FIG. 165

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TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
.33	76.30	73.29	75.85	73.41	76.21	73.01	73.15
.87	73.57	73.29	73.10	73.41	70.74	73.01	75.89
33.27	76.30	73.29	75.85	73.41	78.94	73.01	75.89
65.67	76.30	73.29	73.10	70.68	76.21	73.01	75.89
98.07	76.30	76.03	78.59	70.68	73.47	73.01	73.15
130.47	76.30	73.29	75.85	70.68	76.21	73.01	75.89
162.87	73.57	76.03	73.10	73.41	76.21	73.01	75.89
195.27	73.57	73.29	75.85	73.41	76.21	73.01	75.89
227.67	76.30	73.29	75.85	76.15	76.21	73.01	75.89
260.07	76.30	73.29	78.59	76.15	76.21	73.01	73.15
292.47	76.30	76.03	75.85	76.15	76.21	73.01	78.64
324.87	76.30	76.03	78.59	81.56	78.94	75.76	78.64
357.27	79.03	76.03	78.59	84.19	81.61	75.76	78.64
389.67	76.30	76.03	78.59	86.82	81.61	75.76	78.64
422.07	79.03	76.03	78.59	92.09	84.24	78.51	81.33
454.47	79.03	78.77	81.29	94.72	84.24	78.51	81.33
486.87	81.70	78.77	81.29	97.35	86.87	81.21	83.97
519.27	81.70	81.45	81.29	102.6	94.76	81.21	83.97
551.67	81.70	81.45	86.57	105.2	97.39	83.86	86.61
584.07	86.95	84.09	89.22	110.5	100.0	86.50	86.61
616.47	92.20	86.73	83.93	115.8	102.7	86.50	91.89
648.87	86.95	89.36	89.22	121.0	110.5	91.79	94.53
681.27	92.20	92.00	97.14	128.9	113.2	94.44	97.18
713.67	97.46	97.27	97.14	134.2	118.4	97.09	97.18
746.07	97.46	99.91	102.4	139.5	121.1	99.73	99.82
778.47	102.7	102.5	107.7	147.4	131.6	105.0	110.4
810.87	108.0	107.8	110.4	155.2	136.8	107.7	110.4
843.27	113.2	110.5	115.6	165.7	139.5	113.0	113.0
875.67	118.5	118.4	123.6	170.9	152.6	115.6	120.9
908.07	126.4	123.6	128.9	178.8	155.2	120.9	118.3
940.47	129.0	128.9	136.8	189.2	163.1	126.2	128.9
972.87	139.5	144.7	142.1	197.1	173.5	131.5	139.4
1005.27	147.4	144.7	155.3	207.6	181.4	136.8	139.4
1037.67	157.8	152.6	160.5	218.0	189.2	144.7	147.4
1070.07	168.3	160.5	171.0	228.5	197.1	147.4	157.9
1102.80	394.3	384.3	406.5	356.8	345.8	292.4	294.9
1135.20	405.0	395.2	422.3	362.3	351.3	295.2	300.4
1167.60	412.8	403.2	427.5	370.4	354.0	300.6	305.8
1200.00	425.9	416.4	438.0	375.8	362.1	306.1	305.8
1232.40	436.4	426.9	448.6	381.3	367.5	311.5	319.4

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-152
CHECK	EGBERT 6/18/62				02-8000
APR	SHIMONO 6/20/62				PAGE
APR	Chow 6/20/62				FIG. 166
CONTRACT NO.					

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
1264.80	446.8	437.4	461.7	392.1	375.7	317.0	319.4
1297.20	457.3	450.5	474.9	400.3	381.1	322.4	324.9
1329.60	473.0	463.6	488.0	408.1	389.2	327.9	330.3
1362.00	486.0	476.7	506.4	418.6	400.1	336.1	341.2
1394.40	501.7	492.4	522.2	429.1	407.9	341.5	346.7
1426.80	517.4	505.6	538.0	442.2	418.4	347.0	349.4
1459.20	533.1	523.9	559.0	455.3	428.9	355.2	357.5
1491.60	548.8	539.7	574.8	468.4	439.3	366.1	368.4
1524.00	572.3	521.3	595.8	481.5	455.0	374.3	379.3
1525.62	572.3	560.6	595.8	484.1	457.7	374.3	376.6
2065.62	866.9	859.1	883.8	662.2	643.5	548.9	550.9
2071.02	866.9	861.7	886.4	662.2	643.5	548.9	558.8
2103.42	882.1	871.9	896.6	672.7	651.3	559.5	561.4
2135.82	889.7	884.6	909.4	683.2	661.8	570.0	571.9
2168.22	899.9	894.8	917.0	691.0	667.0	577.9	585.1
2200.62	912.6	907.6	929.8	704.1	680.1	585.8	590.3
2233.02	925.3	920.3	945.1	717.2	690.6	598.9	598.2
2265.42	938.0	930.5	955.4	727.7	703.7	606.8	611.3
2297.82	950.7	943.3	968.1	740.8	716.8	617.4	621.8
2321.04	958.3	950.9	975.8	751.2	727.2	625.3	632.4
2861.04	1112.	1105.	1128.	919.2	900.8	813.0	819.6
3401.04	1174.	1167.	1185.	995.6	979.7	907.6	916.6
3941.04	1210.	1201.	1216.	1039.	1031.	963.9	970.2
4481.04	1225.	1216.	1237.	1073.	1059.	999.7	1001.
4990.80	1228.	1219.	1234.	1055.	1052.	994.6	993.2
5007.00	1228.	1219.	1234.	1055.	1049.	992.1	995.8
5023.20	1225.	1219.	1234.	1055.	1052.	992.1	998.3
5039.40	1225.	1219.	1234.	1057.	1054.	992.1	993.2
5055.60	1228.	1219.	1237.	1057.	1052.	994.6	993.2
5071.80	1225.	1219.	1234.	1055.	1052.	992.1	995.8
5088.00	1225.	1219.	1234.	1057.	1052.	994.6	993.2
5104.20	1228.	1219.	1234.	1055.	1049.	992.1	993.2
5120.40	1228.	1219.	1234.	1055.	1049.	992.1	993.2
5136.60	1225.	1219.	1232.	1057.	1049.	994.6	995.8
5152.80	1225.	1219.	1234.	1057.	1049.	992.1	995.8
5169.00	1225.	1219.	1234.	1057.	1052.	992.1	998.3
5185.20	1225.	1219.	1234.	1055.	1049.	992.1	993.2
5201.40	1223.	1219.	1234.	1055.	1049.	992.1	995.8
5217.60	1228.	1219.	1232.	1057.	1052.	994.6	993.2
5233.80	1225.	1219.	1232.	1057.	1049.	992.1	993.2
CALC	06/11/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		EWA 5-652
CHECK	EGBERT	6/11/62					
APR	SHIMONO	6/20/62					D2-80081
APR	Choban	6/24/62					PAGE
CONTRACT NO.							FIG. 167

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
	-----DEGREES FAHRENHEIT-----						
5250.00	1225.	1219.	1232.	1057.	1049.	994.6	995.8
5266.20	1225.	1219.	1234.	1055.	1049.	994.6	998.3
5282.40	1223.	1216.	1234.	1055.	1054.	992.1	995.8
5298.60	1225.	1219.	1234.	1055.	1052.	994.6	998.3
5314.80	1225.	1216.	1232.	1055.	1052.	992.1	995.8
5331.00	1225.	1216.	1234.	1057.	1052.	994.6	995.8
5347.20	1225.	1216.	1234.	1057.	1049.	994.6	993.2
5363.40	1225.	1219.	1232.	1057.	1052.	994.6	995.8
5379.60	1223.	1216.	1232.	1057.	1052.	994.6	995.8
5395.80	1223.	1216.	1232.	1057.	1054.	994.6	995.8
5411.46	1225.	1216.	1234.	1055.	1049.	992.1	995.8
5427.66	1223.	1216.	1232.	1060.	1054.	999.7	998.3
5443.32	1223.	1219.	1232.	1055.	1052.	992.1	998.3
5459.52	1225.	1216.	1232.	1057.	1052.	992.1	995.8
5475.18	1225.	1216.	1232.	1057.	1052.	994.6	998.3
5490.84	1225.	1214.	1232.	1055.	1052.	992.1	998.3
5506.50	1225.	1219.	1232.	1057.	1052.	994.6	995.8
5522.70	1225.	1216.	1232.	1057.	1049.	992.1	998.3
5538.36	1223.	1219.	1234.	1057.	1052.	994.6	993.2
5554.02	1225.	1216.	1232.	1055.	1052.	994.6	995.8
5570.22	1228.	1216.	1232.	1057.	1052.	953.7	995.8
5586.42	1225.	1216.	1234.	1055.	1049.	994.6	995.8
5602.62	1225.	1216.	1232.	1055.	1049.	992.1	995.8
5618.82	1225.	1216.	1232.	1057.	1052.	992.1	995.8
5635.02	1220.	1214.	1232.	1055.	1049.	992.1	993.2
5651.22	1220.	1214.	1232.	1055.	1049.	992.1	993.2
5667.42	1223.	1214.	1232.	1055.	1052.	992.1	998.3
5683.62	1220.	1216.	1232.	1055.	1049.	992.1	993.2
5699.82	1220.	1216.	1232.	1055.	1049.	992.1	993.2
5716.02	1223.	1214.	1232.	1055.	1046.	992.1	998.3
5732.22	1220.	1216.	1232.	1055.	1049.	992.1	993.2
5748.42	1220.	1214.	1229.	1055.	1049.	992.1	993.2
5764.62	1225.	1214.	1229.	1055.	1052.	992.1	998.3
5780.82	1220.	1214.	1232.	1055.	1046.	992.1	993.2
5797.02	1220.	1214.	1229.	1052.	1049.	992.1	995.8
5813.22	1220.	1214.	1227.	1055.	1046.	989.5	993.2
5829.42	1220.	1211.	1227.	1055.	1049.	989.5	993.2
5845.62	1220.	1211.	1227.	1052.	1046.	992.1	993.2
5861.82	1218.	1211.	1229.	1052.	1046.	992.1	993.2
5878.02	1220.	1211.	1229.	1055.	1046.	989.5	993.2
CALC	06/11/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		EWA 5-652
CHECK	FRABERT	6/18/62					
APR	SHIMONO	6/20/62					D2-80081
APR	Chabon	6/20/62					
CONTRACT NO.							PAGE FIG. 168

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
5890.98	1218.	1211.	1232.	1050.	1046.	989.5	990.7

CALC	06/11/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				02-80081
APR	SHIMONO 6/20/62				
APR	Cholera 6/20/62				
CONTRACT NO.					PAGE F16.169

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TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F				
.33	73.15	76.33				
.87	73.15	76.33				
33.27	73.15	73.60				
65.67	73.15	76.33				
98.07	75.90	76.33				
130.47	73.15	76.33				
162.87	73.15	76.33				
195.27	73.15	73.60				
227.67	75.90	76.33				
260.07	75.90	76.33				
292.47	75.90	79.06				
324.87	78.64	81.72				
357.27	78.64	84.34				
389.67	81.33	86.97				
422.07	83.97	89.60				
454.47	86.61	92.22				
486.87	89.26	94.85				
519.27	91.90	100.1				
551.67	94.54	102.7				
584.07	97.18	108.0				
616.47	99.82	113.2				
648.87	105.1	118.5				
681.27	110.4	121.1				
713.67	113.0	129.0				
746.07	118.3	134.2				
778.47	123.6	139.5				
810.87	131.5	147.4				
843.27	136.8	160.4				
875.67	144.7	165.7				
908.07	152.6	170.9				
940.47	160.5	183.9				
972.87	168.4	191.8				
1005.27	176.2	202.2				
1037.67	186.7	212.6				
1070.07	194.6	220.5				
1102.80	346.6	367.2				
1135.20	349.4	372.6				
1167.60	357.5	378.0				
1200.00	363.0	380.7				
1232.40	368.4	388.8				
CALC	06/11/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	
CHECK	EGBERT	6/11/62				
APR	SHIMONO	6/20/62				
APR	Chofee	6/20/62				
CONTRACT NO.					PAGE	
					FIG. 170	

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F			
1264.80	376.6	399.7			
1297.20	384.8	407.5			
1329.60	392.9	420.6			
1362.00	403.7	428.4			
1394.40	411.6	441.5			
1426.80	427.3	451.9			
1459.20	437.9	470.2			
1491.60	451.0	485.9			
1524.00	464.1	504.2			
1525.62	466.8	504.2			
2065.62	661.2	689.7			
2071.02	663.9	695.0			
2103.42	669.1	702.8			
2135.82	679.6	710.6			
2168.22	687.5	721.1			
2200.62	700.6	739.4			
2233.02	716.4	752.4			
2265.42	726.9	765.1			
2297.82	742.7	780.3			
2321.04	750.6	790.5			
2861.04	926.8	953.0			
3401.04	1003.	1024.			
3941.04	1050.	1066.			
4481.04	1076.	1089.			
4990.80	1068.	1081.			
5007.00	1065.	1078.			
5023.20	1065.	1078.			
5039.40	1065.	1078.			
5055.60	1065.	1081.			
5071.80	1065.	1081.			
5088.00	1068.	1081.			
5104.20	1065.	1081.			
5120.40	1068.	1084.			
5136.60	1068.	1081.			
5152.80	1065.	1084.			
5169.00	1065.	1081.			
5185.20	1065.	1081.			
5201.40	1065.	1081.			
5217.60	1068.	1084.			
5233.80	1065.	1084.			
CALC	06/11/72	REVISED	DATE		
CHECK	EGBERT				
APR	SHIMONO				
APR	Clohes				
				CORRUGATED SHEAR WEB PANEL	
				EWA NO. 05652 SPEC. 0201	
				COND. NO. 01 RUN 01	
				THE BOEING COMPANY	
				PAGE	
CONTRACT NO.				F16.171	

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PROTECTOR BUSINESS FORMS

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F				
5250.00	1065.	1084.				
5266.20	1065.	1084.				
5282.40	1065.	1081.				
5298.60	1065.	1084.				
5314.80	1065.	1078.				
5331.00	1068.	1084.				
5347.20	1065.	1084.				
5363.40	1068.	1084.				
5379.60	1068.	1084.				
5395.80	1068.	1084.				
5411.46	1065.	1081.				
5427.66	1068.	1081.				
5443.32	1065.	1076.				
5459.52	1065.	1078.				
5475.18	1065.	1084.				
5490.84	1068.	1084.				
5506.50	1065.	1081.				
5522.70	1060.	1084.				
5538.36	1065.	1081.				
5554.02	1065.	1081.				
5570.22	1068.	1081.				
5586.42	1065.	1081.				
5602.62	1065.	1081.				
5618.82	1065.	1078.				
5635.02	1065.	1078.				
5651.22	1065.	1081.				
5667.42	1065.	1081.				
5683.62	1065.	1081.				
5699.82	1065.	1084.				
5716.02	1065.	1081.				
5732.22	1065.	1081.				
5748.42	1065.	1081.				
5764.62	1065.	1078.				
5780.82	1063.	1078.				
5797.02	1065.	1078.				
5813.22	1063.	1078.				
5829.42	1063.	1081.				
5845.62	1065.	1078.				
5861.82	1063.	1078.				
5878.02	1063.	1076.				
CALC	06/11/72		REVISED	DATE		
CHECK	EGBERT	6/18/62			CORRUGATED SHEAR WEB PANEL	
APR	SHIMONO	6/20/62			EWA NO. 05652	SPEC. 0201
APR	Cholera	6/24/72			COND. NO. 01	RUN 01
					THE BOEING COMPANY	
					PAGE	
CONTRACT NO.					F16.172	

TIME	7-12	8-12
SEC.	T-44	T-45
	DEG F	DEG F
5890.98	1063.	1078.

CALC	06/11/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	EGBERT 6/18/62				5-652
APR	SHIMONO 6/20/62				D2-80031
APR	Charles 6/20/62				
CONTRACT NO.					PAGE
					FIG. 173

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2.5000

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
-----INCHES-----							
.33	0.005	0.004-	0.003	0.001-	0.017-	0.003-	0.090
.87	0.005	0.001	0.006	0.001	0.011-	0.005	0.101
33.27	0.011	0.004-	0.006	0.003	0.009	0.001	0.152
65.67	0.011	0.000	0.010	0.007	0.011	0.001	0.125
98.07	0.007	0.002-	0.006	0.001-	0.011-	0.000	0.168
130.47	0.007	0.002-	0.013	0.007	0.005-	0.001	0.151
162.87	0.009	0.002-	0.010	0.003	0.021-	0.001	0.140
195.27	0.011	0.003	0.012	0.007	0.015-	0.001	0.058
227.67	0.007	0.000	0.020	0.000-	0.017-	0.000	0.042
260.07	0.009	0.001	0.038	0.007	0.003	0.001	0.061
292.47	0.007	0.002-	0.012	0.001	0.005-	0.001	0.053
324.87	0.009	0.000	0.010	0.001-	0.017-	0.001	0.054
357.27	0.007	0.004-	0.017	0.003	0.007-	0.001	0.077
389.67	0.009	0.002-	0.010	0.007	0.013-	0.001	0.051
422.07	0.013	0.002-	0.013	0.003	0.001-	0.001-	0.065
454.47	0.011	0.001	0.010	0.000-	0.015-	0.003	0.063
486.87	0.007	0.002-	0.027	0.007	0.000	0.005	0.075
519.27	0.009	0.000	0.020	0.001	0.001-	0.001	0.072
551.67	0.011	0.000	0.005	0.009	0.005-	0.000	0.061
584.07	0.015	0.002-	0.005	0.010	0.015-	0.005-	0.048
616.47	0.015	0.002-	0.015	0.014	0.011-	0.001-	0.041
648.87	0.005	0.002-	0.013	0.010	0.011-	0.001-	0.068
681.27	0.017	0.005	0.010	0.014	0.015-	0.003-	0.072
713.67	0.015	0.005	0.003	0.014	0.007-	0.005-	0.087
746.07	0.017	0.007	0.017	0.019	0.017-	0.005-	0.111
778.47	0.027	0.005	0.019	0.019	0.007	0.005-	0.101
810.87	0.025	0.003	0.031	0.021	0.011-	0.005-	0.116
843.27	0.025	0.005	0.022	0.025	0.015-	0.005-	0.125
875.67	0.033	0.005	0.019	0.025	0.022-	0.009-	0.111
908.07	0.033	0.001	0.022	0.025	0.017-	0.013-	0.103
940.47	0.039	0.007	0.020	0.029	0.030-	0.011-	0.188
972.87	0.047	0.007	0.032	0.034	0.017-	0.011-	0.025
1005.27	0.051	0.011	0.022	0.036	0.017-	0.017-	0.010
1037.67	0.047	0.013	0.022	0.043	0.028-	0.017-	0.017
1070.07	0.055	0.013	0.029	0.045	0.024-	0.017-	0.001-
1102.80	0.035	0.058	0.003-	0.090	0.034-	0.025-	0.031-
1135.20	0.045	0.061	0.012	0.085	0.040-	0.025-	0.038-
1167.60	0.037	0.061	0.001	0.092	0.038-	0.025-	0.038-
1200.00	0.035	0.061	0.017	0.094	0.028-	0.025-	0.033-
1232.40	0.033	0.059	0.005	0.097	0.038-	0.025-	0.038-
CALC	06/11/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/12/62					
APR	SHIMONO	6/19/62					
APR	Chofee	6/20/62					
CONTRACT NO.							

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TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
1264.80	0.039	0.061	0.000	0.097	0.040-	0.025-	0.047-
1297.20	0.039	0.065	0.008	0.096	0.038-	0.029-	0.043-
1329.60	0.041	0.061	0.010	0.099	0.036-	0.036-	0.043-
1362.00	0.041	0.065	0.005-	0.103	0.042-	0.029-	0.041-
1394.40	0.037	0.069	0.007-	0.108	0.030-	0.031-	0.048-
1426.80	0.041	0.067	0.003-	0.112	0.028-	0.031-	0.043-
1459.20	0.041	0.074	0.007-	0.110	0.038-	0.032-	0.055-
1491.60	0.029	0.067	0.003-	0.116	0.044-	0.029-	0.038-
1524.00	0.037	0.073	0.000	0.116	0.051-	0.036-	0.055-
1525.62	0.037	0.076	0.014-	0.119	0.047-	0.034-	0.062-
2065.62	0.011	0.108	0.037-	0.154	0.072-	0.038-	0.106-
2071.02	0.009	0.104	0.035-	0.152	0.076-	0.036-	0.113-
2103.42	0.005	0.108	0.044-	0.150	0.074-	0.040-	0.101-
2135.82	0.005	0.112	0.033-	0.152	0.055-	0.040-	0.108-
2168.22	0.009	0.108	0.042-	0.152	0.066-	0.044-	0.106-
2200.62	0.007	0.110	0.024-	0.154	0.074-	0.040-	0.113-
2233.02	0.007	0.112	0.040-	0.157	0.074-	0.044-	0.111-
2265.42	0.009	0.110	0.040-	0.159	0.076-	0.044-	0.113-
2297.82	0.013	0.114	0.037-	0.163	0.082-	0.044-	0.122-
2321.04	0.013	0.118	0.029-	0.170	0.082-	0.050-	0.116-
2861.04	0.025	0.157	0.035-	0.217	0.103-	0.063-	0.178-
3401.04	0.039	0.176	0.022-	0.242	0.112-	0.085-	0.186-
3941.04	0.060	0.189	0.003	0.262	0.133-	0.102-	0.213-
4481.04	0.070	0.198	0.003	0.273	0.126-	0.112-	0.207-
4990.80	0.047	0.200	0.014-	0.261	0.122-	0.106-	0.223-
5007.00	0.194	0.185	0.084	0.266	0.124-	0.123-	0.216-
5023.20	0.218	0.187	0.110	0.270	0.112-	0.135-	0.214-
5039.40	0.237	0.179	0.097	0.385	0.122-	0.135-	0.206-
5055.60	0.255	0.170	0.124	0.387	0.105-	0.127-	0.197-
5071.80	0.265	0.168	0.128	0.393	0.112-	0.125-	0.204-
5088.00	0.290	0.164	0.138	0.391	0.114-	0.119-	0.193-
5104.20	0.296	0.161	0.175	0.395	0.093-	0.121-	0.178-
5120.40	0.308	0.159	0.166	0.396	0.105-	0.118-	0.192-
5136.60	0.322	0.155	0.188	0.398	0.087-	0.119-	0.176-
5152.80	0.334	0.153	0.178	0.395	0.110-	0.116-	0.181-
5169.00	0.336	0.142	0.176	0.404	0.107-	0.112-	0.179-
5185.20	0.347	0.144	0.192	0.404	0.099-	0.114-	0.186-
5201.40	0.351	0.140	0.190	0.406	0.091-	0.112-	0.169-
5217.60	0.365	0.144	0.195	0.408	0.109-	0.108-	0.179-
5233.80	0.369	0.140	0.206	0.408	0.103-	0.110-	0.186-

100% OF THE TOTAL WEIGHT OF THE SHEAR WEB PANEL SHALL BE MADE UP OF 100% OF THE TOTAL WEIGHT OF THE SHEAR WEB PANEL.

CALC	06/11/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/13/62				02-80081
APR	SHIMONO 6/19/62				
APR	Choban 6/24/62				
CONTRACT NO.					PAGE FIG. 175

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
INCHES							
5250.00	0.373	0.136	0.214	0.409	0.112-	0.108-	0.186-
5266.20	0.379	0.134	0.220	0.404	0.110-	0.108-	0.185-
5282.40	0.383	0.131	0.223	0.400	0.087-	0.110-	0.178-
5298.60	0.393	0.133	0.237	0.411	0.110-	0.110-	0.178-
5314.80	0.408	0.131	0.249	0.413	0.065-	0.102-	0.157-
5331.00	0.414	0.129	0.244	0.415	0.114-	0.100-	0.179-
5347.20	0.418	0.127	0.266	0.419	0.087-	0.104-	0.181-
5363.40	0.428	0.121	0.292	0.419	0.072-	0.104-	0.178-
5379.60	0.436	0.121	0.270	0.421	0.099-	0.102-	0.178-
5395.80	0.444	0.118	0.282	0.419	0.087-	0.094-	0.176-
5411.46	0.448	0.116	0.275	0.424	0.091-	0.098-	0.183-
5427.66	0.458	0.112	0.280	0.426	0.089-	0.090-	0.181-
5443.32	0.454	0.112	0.296	0.430	0.070-	0.092-	0.185-
5459.52	0.465	0.110	0.301	0.432	0.105-	0.094-	0.176-
5475.18	0.471	0.106	0.299	0.430	0.095-	0.092-	0.183-
5490.84	0.469	0.104	0.306	0.428	0.089-	0.090-	0.192-
5506.50	0.469	0.108	0.298	0.425	0.086-	0.089-	0.169-
5522.70	0.469	0.108	0.296	0.424	0.099-	0.092-	0.174-
5538.36	0.471	0.108	0.280	0.432	0.091-	0.094-	0.181-
5554.02	0.481	0.108	0.304	0.434	0.091-	0.089-	0.178-
5570.22	0.485	0.104	0.323	0.436	0.107-	0.094-	0.167-
5586.42	0.497	0.101	0.323	0.441	0.091-	0.089-	0.181-
5602.62	0.491	0.103	0.323	0.436	0.091-	0.085-	0.179-
5618.82	0.501	0.104	0.330	0.441	0.091-	0.083-	0.171-
5635.02	0.518	0.106	0.351	0.447	0.086-	0.079-	0.176-
5651.22	0.532	0.101	0.358	0.456	0.087-	0.073-	0.178-
5667.42	0.538	0.099	0.379	0.454	0.068-	0.071-	0.178-
5683.62	0.556	0.104	0.384	0.458	0.082-	0.071-	0.169-
5699.82	0.572	0.099	0.401	0.450	0.080-	0.069-	0.171-
5716.02	0.585	0.118		0.460	0.082-	0.071-	0.169-
5732.22	0.611	0.118		0.458	0.087-	0.067-	0.167-
5748.42	0.631	0.121		0.475	0.074-	0.065-	0.158-
5764.62	0.638	0.121		0.467	0.082-	0.069-	0.186-
5780.82	0.662	0.288-		0.473	0.082-	0.063-	0.176-
5797.02	0.697	0.276-		0.477	0.087-	0.067-	0.171-
5813.22	0.699	0.276-		0.475	0.078-	0.069-	0.162-
5829.42	0.727	0.272-		0.486	0.074-	0.063-	0.144-
5845.62	0.784	0.276-		0.491	0.065-	0.056-	0.167-
5861.82	0.786	0.264-		0.454	0.074-	0.056-	0.176-
5878.02		0.250-		0.471	0.078-	0.050-	0.174-
EPI ROD SLIPPED OFF CLIP WHEN HEAT SHIELD BENT.							
CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL			
CHECK	EGIBERT 6/14/62			EWA NO. 05652 SPEC. 0201			
APR	SHIMONO 6/19/62			COND. NO. 01 RUN 01			
APR	CLYDE 6/20/62			THE BOEING COMPANY			
CONTRACT NO.				PAGE-			
				FG-176			

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
5890.98	0.300	0.166-	—	0.166-	0.128-	0.131-	0.244-

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/62				FIG. 177
APR	SHIMONO 6/19/62				
APR	Cloher 6/20/62				
CONTRACT NO.					PAGE FIG. 177

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TIME SEC.	1-4 D-08 INCHES	2-4 L-01 POUNDS
.33	0.009-	7.597-
.87	0.005-	15.19
33.27	0.005-	75.97
65.67	0.005-	37.98
98.07	0.005-	22.79
130.47	0.009-	106.4
162.87	0.005-	53.18
195.27	0.001-	15.19
227.67	0.003-	22.79
260.07	0.005-	37.98
292.47	0.007-	53.18
324.87	0.005-	7.597
357.27	0.009-	37.98
389.67	0.005-	7.597
422.07	0.010-	30.39
454.47	0.007-	7.597-
486.87	0.009-	37.98
519.27	0.007-	37.98
551.67	0.009-	0.000
584.07	0.010-	7.597
616.47	0.007-	68.37
648.87	0.009-	22.79
681.27	0.012-	0.000
713.67	0.009-	22.79
746.07	0.009-	30.39
778.47	0.014-	22.79
810.87	0.010-	30.39
843.27	0.009-	7.597
875.67	0.014-	7.597
908.07	0.012-	22.79
940.47	0.014-	7.597
972.87	0.018-	15.19-
1005.27	0.020-	22.79
1037.67	0.016-	7.597-
1070.07	0.018-	7.597
1102.80	0.032-	7.597
1135.20	0.030-	0.000
1167.60	0.030-	15.19
1200.00	0.032-	22.79
1232.40	0.034-	106.4

DATE	06/11/62	REVISED	DATE			
CHECK	EGBERT	6/18/62			CORRUGATED SHEAR WEB PANEL	EWA
APR	SHIMONO	6/19/62			EWA NO. 05652	5-652
APR	Choke	6/20/62			SPEC. 0201	
					COND. NO. 01	D2-80081
					RUN 01	
					THE BOEING COMPANY	PAGE
						FIG. 178
CONTRACT NO.						

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TIME SEC.	1-4 D-08 INCHES	2-4 L-01 POUNDS
1264.80	0.030-	0.000
1297.20	0.032-	15.19
1329.60	0.038-	7.597-
1362.00	0.038-	15.19-
1394.40	0.038-	15.19-
1426.80	0.041-	37.98
1459.20	0.038-	0.000
1491.60	0.041-	37.98-
1524.00	0.045-	15.19-
1526.62	0.047-	37.98-
2065.62	0.054-	30.39-
2071.02	0.058-	22.79-
2103.42	0.058-	37.98-
2135.82	0.058-	91.16
2168.22	0.067-	45.58-
2200.62	0.058-	30.39-
2233.02	0.060-	37.98-
2265.42	0.063-	45.58-
2297.82	0.065-	22.79-
2321.04	0.067-	37.98-
2861.04	0.087-	75.97-
3401.04	0.098-	83.56-
3941.04	0.111-	98.75-
4481.04	0.120-	113.9-
4990.80	0.120-	144.3-
5007.00	0.105-	98.75
5023.20	0.105-	265.9✓
5039.40	0.100-	471.0
5055.60	0.087-	782.4
5071.80	0.087-	1041.✓
5088.00	0.076-	1253.
5104.20	0.074-	1504.✓
5120.40	0.069-	1580.
5136.60	0.063-	1793.
5152.80	0.060-	1952.✓
5169.00	0.058-	2127.
5185.20	0.049-	2271.
5201.40	0.052-	2378.
5217.60	0.050-	2431.
5233.80	0.047-	2507.✓

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 SPEC. 0201 RUN 01 THE BOEING COMPANY	EWA 5-657
CHECK	EGBERT 6/18/62				
APR	SHIMONO 6/19/62				
APR	Chen 6/20/2				
CONTRACT NO.					DA-80081 F16.179

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TIME SEC.	1-4 D-08 INCHES	2-4 L-01 POUNDS
5250.00	0.043-	2659.
5266.20	0.043-	2803.
5282.40	0.041-	2864.
5298.60	0.032-	2993.✓
5314.80	0.034-	3160.
5331.00	0.034-	3259.
5347.20	0.030-	3358.
5363.40	0.025-	3532.✓
5379.60	0.021-	3677.
5395.80	0.025-	3753.
5411.46	0.018-	3836.
5427.66	0.018-	3958.✓
5443.32	0.016-	4125.
5459.52	0.010-	4216.
5475.18	0.009-	4193.
5490.84	0.012-	4163.
5506.50	0.014-	4178.
5522.70	0.012-	4140.
5538.36	0.009-	4117.
5554.02	0.009-	4269.
5570.22	0.001-	4414.
5586.42	0.001-	4497.✓
5602.62	0.001-	4619.
5618.82	0.007	4809.
5635.02	0.007	5029.✓
5651.22	0.014	5233.✗
5667.42	0.017	5476.✓
5683.62	0.019	5559.✓
5699.82	0.023	5688.✓
5716.02	0.021	5620.✓
5732.22	0.025	5771.
5748.42	0.023	5710.
5764.62	0.025	5650.
5780.82	0.025	5771.✓
5797.02	0.016	5657.
5813.22	0.014	5392.
5829.42	0.016	5612.
5845.62	0.021	5718.
5861.82	0.005	5014.
5878.02	0.010	4892.

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-65R
CHECK	EGBERT 6/18/62				
APR	SHIMONO 6/19/62				
APR	Cholera 6/20/62				02-800?
					PAGE
CONTRACT NO.					FIG. 180

TIME 1-4
SEC. 0-08
INCHES
5890.98 0.121-

2-4
L-01
POUNDS
113.9-

CALC	06/11/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0201 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK BY	EGERT 4/18/2				DR-80081
APR	SHIMONO 4/19/2				
APR	Chobu 4/20/2				
CONTRACT NO.					PAGE FIG. 181

U6 5553 7450

2-5000

TEMPERATURES,
DEFLECTIONS
& LOADS

*THERMOCOUPLE DATA (SEE FIG. 5 FOR LOCATIONS)

FIGURE NO.

T-01, T-02, T-03, T-04, T-05, T-06, T-07	183-185
T-08, T-09, T-10, T-11, T-12, T-13, T-14	186-188
T-15, T-16, T-17, T-18, T-19, T-20, T-21	189-191
T-22, T-23, T-24, T-25, T-26, T-27, T-29	192-194
T-30, T-31, T-32, T-33, T-34, T-35, T-36	195-197
T-37, ----- T-42, T-43	198-200
T-44, T-45	201-203
T-38, T-39, T-40, T-41	204-206

APPROVED BY K.E. Dancy 7/18/62 E.F. Shlenfeldt RADIANT HEAT LAB.

*DEFLECTION DATA AND LOAD (SEE FIG. 16 FOR LOCATIONS)

FIGURE NO.

D-01, D-02, D-03, D-04, D-05, D-06, D-07	207-209
D-08..... L-01	210-212

TOLERANCES:

THERMOCOUPLES = $\pm 45^{\circ}\text{F}$

EDI'S

(ALL DEFLECTIONS) = ± 0.005 inches

LOAD

L-01 = ± 50 pounds

APPROVED BY Marv Clopper 7/15/62 INSTRUMENTATION LAB.

- *TEMPERATURES IN $^{\circ}\text{F}$
- *DEFLECTIONS IN INCHES
- *LOADS IN POUNDS

CALC	STOPP	6/25/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 5-652 SPEC. 0301 COND. NO. 01 RUN 01	EWA 5-652
CHECK						
APPD						D2-80081
APPD						
					THE BOEING COMPANY	PAGE FIG. 182

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
.33	88.91	86.73	86.73	92.16	81.21	78.55	76.15
.87	91.56	84.09	89.36	92.16	86.50	78.55	78.89
33.27	91.56	76.03	86.73	92.16	86.50	81.25	78.89
65.67	88.91	78.77	89.36	92.16	89.15	83.89	81.56
98.07	91.56	76.03	86.73	92.16	86.50	81.25	78.89
130.47	91.56	81.45	92.00	97.42	123.5	113.0	105.3
162.87	107.5	86.73	97.27	107.9	160.5	128.8	118.4
195.27	120.8	115.7	115.7	123.7	210.5	168.4	142.1
227.67	136.7	136.8	139.5	155.2	260.4	205.2	165.7
260.07	155.3	160.5	163.1	186.6	284.2	239.4	194.5
292.47	176.4	189.3	191.9	220.5	325.2	278.8	238.9
324.87	192.2	212.9	226.0	265.0	385.2	327.8	289.0
357.27	202.8	246.9	254.8	294.2	393.4	333.3	294.4
389.67	221.3	270.5	281.0	334.9	435.7	355.1	302.5
422.07	245.0	291.9	310.9	370.1	427.8	330.5	262.5
454.47	260.9	319.1	338.1	394.5	451.5	355.1	265.1
486.87	279.3	338.1	368.0	428.7	491.0	379.6	291.7
519.27	301.2	362.6	400.6	460.1	533.1	401.4	308.0
521.97	301.2	357.2	400.6	462.7	533.1	406.6	310.7
1317.26	473.8	476.7	497.7	504.6	344.3	231.5	215.4
1857.26	505.6	489.8	492.4	481.1	417.3	308.7	259.9
2397.26	500.3	474.1	479.3	462.7	374.3	286.9	265.1
3281.60	502.9	479.3	479.3	468.0	363.4	286.9	238.9
3314.00	524.1	487.2	479.3	468.0	398.8	341.4	297.1
3346.40	537.3	505.6	489.8	478.4	433.1	363.3	299.8
3378.80	574.3	544.9	510.8	496.8	480.5	419.8	362.3
3411.20	595.4	573.8	531.8	520.3	488.4	430.3	354.1
3443.60	621.8	615.7	555.4	538.6	512.1	440.8	373.1
3476.00	640.3	626.2	584.3	562.2	538.4	461.9	378.5
3508.40	648.3	642.0	605.2	585.7	535.8	446.1	373.1
3540.80	677.3	662.9	626.2	604.0	564.7	488.2	418.6
3562.94	687.9	678.7	642.0	624.9	575.3	493.5	410.7
4102.94	972.2	935.6	940.7	925.9	810.4	704.0	541.7
4642.94	1042.	991.7	971.3	925.9	871.8	779.4	646.5
4937.78	1055.	976.4	958.6	905.6	807.9	732.9	591.5
4970.18	1073.	986.6	961.1	903.0	810.4	753.9	638.6
5002.58	1104.	1070.	973.8	913.2	830.9	792.2	672.6
5034.98	1141.	1072.	1038.	1002.	1013.	948.2	781.7
5067.38	1164.	1110.	1077.	1046.	963.9	897.0	746.0
5099.78	1196.	1136.	1116.	1077.	1041.	961.0	812.3
CALC	06/16/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY		EWA 5-652
CHECK	EGBERT	6/19/72					
APR	SHIMONO	6/20/72					DR-80081
APR	Cloben	6/20/72					PAGE
CONTRACT NO.							FIG. 183

200 10

200

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
5132.18	1227.	1172.	1149.	1116.	1067.	991.6	845.4
5164.58	1250.	1193.	1177.	1149.	1085.	1025.	870.8
5196.98	1245.	1196.	1198.	1175.	1096.	1017.	868.3
5229.38	1237.	1206.	1216.	1190.	1101.	1023.	875.9
5261.78	1253.	1211.	1232.	1216.	1124.	1043.	883.5
5294.18	1284.	1239.	1255.	1237.	1160.	1069.	926.8
5326.58	1305.	1260.	1283.	1270.	1295.	1201.	1029.
5358.98	1346.	1296.	1309.	1296.	1212.	1131.	980.3
5380.58	1367.	1314.	1325.	1306.	1215.	1131.	935.3
5650.58	1484.	1400.	1425.	1383.	1311.	1209.	1073.
5682.98	1505.	1410.	1430.	1391.	1326.	1243.	1111.
5715.38	1546.	1451.	1461.	1422.	1368.	1287.	1155.
5747.78	1584.	1482.	1490.	1448.	1391.	1315.	1184.
5780.18	1621.	1519.	1522.	1473.	1417.	1344.	1212.
5812.58	1648.	1556.	1551.	1502.	1432.	1367.	1246.
5844.98	1683.	1586.	1575.	1520.	1469.	1408.	1294.
5877.38	1716.	1613.	1605.	1555.	1500.	1434.	1331.
5909.78	1742.	1634.	1631.	1579.	1513.	1458.	1351.
5942.18	1750.	1653.	1648.	1593.	1511.	1447.	1346.
5974.58	1750.	1648.	1656.	1601.	1502.	1434.	1336.
6006.98	1759.	1650.	1664.	1609.	1532.	1471.	1356.
6039.38	1759.	1653.	1669.	1619.	1545.	1471.	1364.
6071.78	1753.	1653.	1664.	1606.	1519.	1450.	1349.
6104.18	1756.	1639.	1658.	1603.	1519.	1455.	1349.
6136.58	1761.	1642.	1656.	1601.	1519.	1453.	1349.
6168.98	1770.	1658.	1658.	1598.	1505.	1447.	1341.
6201.38	1773.	1650.	1658.	1603.	1511.	1453.	1351.
6233.78	1773.	1656.	1658.	1598.	1513.	1447.	1351.
6266.18	1773.	1650.	1658.	1601.	1511.	1455.	1356.
6298.58	1775.	1648.	1661.	1595.	1519.	1440.	1349.
6330.98	1775.	1653.	1664.	1598.	1516.	1447.	1351.
6363.38	1775.	1648.	1661.	1595.	1511.	1450.	1362.
6395.78	1773.	1650.	1664.	1598.	1513.	1447.	1356.
6428.18	1773.	1645.	1664.	1601.	1511.	1458.	1367.
6460.58	1778.	1648.	1666.	1601.	1540.	1468.	1385.
6470.84	1775.	1648.	1669.	1606.	1535.	1465.	1362.
6487.04	1773.	1648.	1666.	1611.	1540.	1478.	1377.
6503.24	1773.	1650.	1669.	1614.	1543.	1465.	1364.
6519.44	1773.	1648.	1669.	1611.	1535.	1465.	1359.
6535.64	1773.	1648.	1666.	1609.	1535.	1460.	1356.
CALC	06/16/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/19/2					
APR	SHIMONO	6/20/2					
APR	Clober	6/20/2					
CONTRACT NO.					EWA 5-652 D2-80081 FIG. 184		

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
6551.84	1770.	1650.	1666.	1609.	1529.	1465.	1359.
6568.04	1764.	1648.	1664.	1611.	1519.	1453.	1349.
6584.24	1764.	1648.	1664.	1611.	1527.	1465.	1369.
6600.44	1767.	1648.	1664.	1614.	1529.	1465.	1356.
6616.64	1773.	1650.	1664.	1609.	1535.	1465.	1364.
6632.84	1770.	1656.	1664.	1609.	1529.	1468.	1382.
6649.04	1775.	1650.	1669.	1614.	1535.	1468.	1380.
6665.24	1775.	1648.	1666.	1614.	1532.	1468.	1369.
6681.44	1775.	1648.	1666.	1606.	1527.	1468.	1356.
6697.64	1770.	1650.	1666.	1609.	1529.	1471.	1374.
6713.84	1773.	1656.	1666.	1611.	1535.	1471.	1382.
6730.04	1775.	1653.	1664.	1611.	1529.	1465.	1367.
6746.24	1773.	1653.	1664.	1611.	1529.	1465.	1362.
6762.44	1773.	1656.	1666.	1611.	1529.	1458.	1367.
6778.64	1778.	1653.	1669.	1609.	1527.	1463.	1362.
6794.84	1773.	1650.	1666.	1611.	1521.	1468.	1372.
6811.04	1773.	1656.	1666.	1611.	1529.	1460.	1349.
6827.24	1773.	1664.	1664.	1609.	1524.	1458.	1356.
6843.44	1773.	1656.	1666.	1609.	1524.	1455.	1351.
6859.64	1773.	1656.	1664.	1609.	1527.	1463.	1362.
6875.84	1773.	1656.	1664.	1611.	1524.	1468.	1364.
6892.04	1773.	1656.	1664.	1606.	1521.	1463.	1359.
6908.24	1773.	1656.	1664.	1609.	1524.	1455.	1359.
6924.44	1773.	1658.	1664.	1609.	1524.	1463.	1364.
6940.64	1773.	1653.	1664.	1609.	1521.	1455.	1343.
6956.84	1773.	1656.	1661.	1606.	1516.	1450.	1351.
6973.04	1770.	1656.	1661.	1606.	1513.	1447.	1336.
6989.24	1773.	1666.	1661.	1603.	1519.	1450.	1346.
7005.44	1773.	1656.	1658.	1606.	1524.	1458.	1369.
7021.64	1775.	1656.	1661.	1603.	1516.	1450.	1346.
7037.84	1781.	1658.	1664.	1606.	1521.	1455.	1356.
7054.04	1778.	1658.	1666.	1606.	1519.	1455.	1364.
7070.24	1781.	1656.	1666.	1609.	1521.	1447.	1351.
7626.44	1016.	899.9	971.3	943.7	772.1	630.3	436.7
8166.44	542.6	500.3	537.0	509.8	273.6	155.3	139.5
.00	*265.9	*199.0	*241.9	*236.9	*144.7	*97.04	*97.57

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/72				D2-80081
APR	SHIMONO 6/29/72				
APR	Choban 6/29/72				
CONTRACT NO.					PAGE FIG. 185

TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
	-----DEGREES FAHRENHEIT-----						
.33	76.35	78.58	78.59	76.08	76.19	67.41	78.77
.87	79.08	78.58	78.59	78.82	76.19	78.42	78.77
33.27	79.08	78.58	78.59	78.82	76.19	78.42	78.77
65.67	79.08	78.58	75.85	76.08	78.92	75.67	76.03
96.07	79.08	78.58	78.59	76.08	76.19	75.67	78.77
130.47	94.86	81.28	75.85	78.82	78.92	78.42	78.77
162.87	102.7	83.92	81.29	81.50	81.59	81.13	81.45
195.27	118.5	86.56	83.93	84.13	81.59	81.13	86.72
227.67	134.2	91.85	86.57	86.77	81.59	86.43	92.00
260.07	176.1	107.7	102.4	94.67	86.86	91.72	102.5
292.47	225.7	139.4	120.9	110.5	100.0	105.0	128.9
324.87	264.8	178.9	155.3	139.5	118.4	128.8	160.5
357.27	288.6	213.0	181.5	178.8	152.6	160.5	189.3
389.67	294.0	239.3	215.7	231.2	184.0	194.8	212.9
422.07	243.9	228.8	220.9	260.0	210.1	218.4	212.9
454.47	241.3	231.4	239.3	291.8	238.9	242.1	220.7
486.87	264.8	239.3	255.1	329.9	265.0	268.5	223.4
519.27	277.9	247.2	273.4	365.2	286.2	292.6	236.5
521.97	280.5	247.2	273.4	367.9	291.6	295.3	233.8
1317.26	267.4	286.8	308.6	340.7	288.9	295.3	270.5
1857.26	291.3	327.7	333.1	351.6	307.9	317.2	308.2
2397.26	313.0	305.9	341.3	376.0	340.4	341.8	308.2
3281.60	294.0	335.9	382.2	429.3	405.4	396.4	335.4
3314.00	337.3	346.8	387.6	447.7	431.5	415.0	349.0
3346.40	356.3	368.6	422.3	492.2	489.1	451.9	362.6
3378.80	399.6	398.6	456.4	544.7	536.3	494.1	392.5
3411.20	404.8	430.2	495.9	591.9	575.5	533.6	419.0
3443.60	420.5	456.5	532.7	636.4	612.2	567.9	447.9
3476.00	441.4	493.3	574.8	681.0	656.7	607.4	476.7
3508.40	446.6	522.3	606.3	712.4	672.4	628.5	505.6
3540.80	483.2	553.8	637.9	741.3	706.4	660.1	534.4
3562.94	485.8	572.2	653.7	759.4	724.7	681.2	550.2
4102.94	585.1	687.9	716.8	774.7	735.2	712.8	655.1
4642.94	723.6	825.2	804.6	787.4	688.1	718.1	770.0
4937.78	655.6	771.5	773.9	782.3	714.3	718.1	731.2
4970.18	739.2	799.6	799.5	810.3	753.4	744.4	759.8
5002.58	764.9	835.4	837.8	853.6	791.6	785.6	790.3
5034.98	795.4	866.0	871.0	894.4	827.2	821.4	820.9
5067.38	795.4	896.7	906.8	930.0	867.9	854.7	854.1
5099.78	830.9	929.9	942.6	970.8	901.0	890.6	887.2
CALC	06/16/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT 6/19/62				EWA NO. 05652		
APR	SHIMONO 6/20/62				SPEC. 0301		
APR	Chobin 6/20/62				COND. NO. 01		
					THE BOEING COMPANY		
					PAGE 1		
CONTRACT NO.					F16.186		

TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHREHEIT-----							
5132.18	871.6	968.3	978.4	1007.	939.1	926.4	928.0
5164.58	899.5	1004.	1019.	1061.	984.9	970.0	961.1
5196.98	927.4	1051.	1074.	1118.	1036.	1019.	1005.
5229.38	927.4	1079.	1105.	1146.	1062.	1053.	1035.
5261.78	962.9	1110.	1139.	1185.	1106.	1092.	1064.
5294.18	978.2	1139.	1170.	1213.	1142.	1120.	1092.
5326.58	1045.	1165.	1201.	1244.	1175.	1154.	1126.
5358.98	1042.	1196.	1229.	1270.	1206.	1182.	1152.
5380.58	1042.	1209.	1245.	1283.	1224.	1198.	1172.
5650.58	1130.	1234.	1252.	1265.	1206.	1198.	1198.
5682.98	1158.	1250.	1276.	1296.	1245.	1221.	1214.
5715.38	1176.	1284.	1315.	1347.	1296.	1268.	1250.
5747.78	1214.	1315.	1353.	1388.	1333.	1307.	1283.
5780.18	1250.	1351.	1390.	1419.	1366.	1343.	1322.
5812.58	1292.	1382.	1423.	1453.	1407.	1379.	1363.
5844.98	1328.	1421.	1465.	1492.	1449.	1418.	1400.
5877.38	1348.	1455.	1501.	1523.	1479.	1452.	1438.
5909.78	1389.	1486.	1530.	1558.	1516.	1488.	1472.
5942.18	1405.	1507.	1560.	1588.	1559.	1523.	1503.
5974.58	1382.	1509.	1571.	1596.	1562.	1528.	1508.
6006.98	1389.	1509.	1571.	1588.	1553.	1526.	1506.
6039.38	1382.	1509.	1565.	1574.	1545.	1515.	1503.
6071.78	1374.	1504.	1555.	1556.	1532.	1504.	1506.
6104.18	1387.	1499.	1552.	1558.	1553.	1510.	1495.
6136.58	1387.	1501.	1560.	1566.	1553.	1512.	1495.
6168.98	1384.	1507.	1560.	1561.	1553.	1512.	1500.
6201.38	1387.	1504.	1560.	1561.	1548.	1515.	1503.
6233.78	1394.	1507.	1560.	1564.	1553.	1515.	1503.
6266.18	1387.	1504.	1560.	1566.	1548.	1515.	1503.
6298.58	1384.	1504.	1560.	1561.	1553.	1515.	1506.
6330.98	1384.	1509.	1560.	1564.	1545.	1515.	1506.
6363.38	1394.	1509.	1563.	1564.	1551.	1515.	1503.
6395.78	1387.	1509.	1560.	1561.	1545.	1515.	1503.
6428.18	1389.	1507.	1560.	1558.	1551.	1512.	1503.
6460.58	1397.	1507.	1560.	1561.	1553.	1510.	1506.
6470.84	1397.	1507.	1560.	1561.	1553.	1512.	1506.
6487.04	1397.	1512.	1560.	1566.	1548.	1518.	1508.
6503.24	1394.	1515.	1565.	1566.	1548.	1515.	1508.
6519.44	1379.	1509.	1560.	1561.	1548.	1515.	1506.
6535.64	1387.	1509.	1560.	1566.	1556.	1515.	1508.
CALC	06/16/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/19/62					
APR	SHIMONO	6/20/62					
APR	Chobor	6/20/62					
CONTRACT NO.					EWA 5-652		
					D2-80081		
					PAGE		
					FIG. 187		

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TIME SEC.	8-3 T-08	3-4 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
6551.84	1397.	1507.	1560.	1561.	1545.	1515.	1514.
6568.04	1394.	1504.	1560.	1558.	1545.	1512.	1506.
6584.24	1400.	1504.	1555.	1556.	1545.	1512.	1506.
6600.44	1400.	1512.	1560.	1561.	1545.	1515.	1508.
6616.64	1400.	1515.	1563.	1561.	1553.	1512.	1508.
6632.84	1397.	1512.	1565.	1561.	1553.	1515.	1516.
6649.04	1394.	1509.	1560.	1561.	1545.	1515.	1516.
6665.24	1392.	1507.	1563.	1564.	1548.	1515.	1511.
6681.44	1400.	1509.	1563.	1564.	1548.	1515.	1508.
6697.64	1397.	1512.	1560.	1564.	1548.	1518.	1508.
6713.84	1402.	1509.	1560.	1561.	1548.	1518.	1508.
6730.04	1394.	1507.	1563.	1561.	1548.	1512.	1508.
6746.24	1405.	1512.	1563.	1561.	1548.	1515.	1511.
6762.44	1389.	1517.	1565.	1566.	1548.	1515.	1508.
6778.64	1397.	1517.	1565.	1566.	1545.	1515.	1514.
6794.84	1400.	1509.	1560.	1561.	1548.	1510.	1511.
6811.04	1407.	1517.	1563.	1561.	1545.	1510.	1514.
6827.24	1387.	1512.	1563.	1558.	1545.	1510.	1508.
6843.44	1397.	1512.	1563.	1561.	1545.	1510.	1511.
6859.64	1402.	1507.	1563.	1556.	1543.	1507.	1514.
6875.84	1405.	1509.	1563.	1556.	1540.	1504.	1514.
6892.04	1400.	1512.	1560.	1556.	1540.	1507.	1514.
6908.24	1394.	1512.	1560.	1556.	1543.	1504.	1514.
6924.44	1405.	1507.	1560.	1556.	1537.	1504.	1514.
6940.64	1400.	1509.	1560.	1556.	1540.	1504.	1514.
6956.84	1394.	1507.	1560.	1550.	1540.	1501.	1514.
6973.04	1400.	1509.	1560.	1556.	1540.	1501.	1514.
6989.24	1405.	1512.	1560.	1556.	1540.	1501.	1514.
7005.44	1400.	1509.	1560.	1550.	1537.	1499.	1514.
7021.64	1405.	1509.	1560.	1550.	1537.	1499.	1514.
7037.84	1394.	1512.	1555.	1550.	1537.	1499.	1508.
7054.04	1394.	1507.	1555.	1550.	1537.	1501.	1508.
7070.24	1400.	1507.	1555.	1550.	1537.	1504.	1508.
7626.44	548.5	722.1	735.2	741.3	625.3	668.0	694.5
8166.44	212.6	417.0	485.4	539.4	483.9	504.6	432.1
800	*110.6	*173.7	*186.9	*213.2	*168.4	*179.1	*160.5

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EXPERT 6/19/72				
APR	SHIMONO 6/20/72				D2-80091
APR	Chobin 6/20/72				PAGE
CONTRACT NO.					FIG. 185

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FIG. 185

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TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
.33	78.75	78.89	83.83	86.61	87.15	89.63	86.53
.87	81.43	78.89	86.48	86.61	89.77	89.63	86.53
33.27	81.43	81.56	86.48	86.61	89.77	92.25	86.53
65.67	84.07	84.19	86.48	86.61	87.15	94.88	89.17
98.07	81.43	78.89	86.48	89.25	87.15	94.88	86.53
130.47	107.8	113.1	89.13	89.25	89.77	131.6	110.3
162.87	126.3	139.5	97.07	94.53	102.9	178.7	134.1
195.27	155.2	181.4	112.9	107.7	116.0	233.5	160.5
227.67	173.6	218.0	139.4	128.9	139.5	294.0	184.2
260.07	226.0	254.6	163.2	152.6	168.2	348.1	231.5
292.47	281.1	294.4	192.1	173.6	194.2	410.0	300.5
324.87	340.9	348.7	228.9	197.2	228.1	491.0	379.6
357.27	346.3	356.8	260.5	223.5	256.7	511.9	414.6
389.67	359.9	381.3	292.5	249.7	288.2	551.0	435.6
422.07	281.1	343.3	322.5	268.1	320.6	538.0	385.1
454.47	283.8	362.3	347.1	289.5	353.0	566.7	393.3
486.87	313.7	402.9	374.4	311.2	388.1	616.3	433.0
519.27	330.0	429.1	404.2	330.3	425.0	663.3	464.6
521.97	335.5	431.7	404.2	333.0	427.6	668.6	469.8
1317.26	275.8	246.8	464.8	453.6	544.9	483.1	456.7
1857.26	316.4	321.5	438.5	477.3	503.2	509.2	440.9
2397.26	346.3	297.1	427.9	464.2	487.6	498.8	506.7
3281.60	308.3	283.5	427.9	472.0	482.3	477.9	443.5
3314.00	362.7	335.1	427.9	474.7	485.0	532.7	485.6
3346.40	379.0	365.0	438.5	490.4	495.4	556.3	498.8
3378.80	424.3	429.1	454.3	514.1	513.6	647.7	551.4
3411.20	421.7	434.3	472.7	543.0	529.2	650.3	569.8
3443.60	429.6	452.6	493.8	569.3	550.1	681.6	585.6
3476.00	445.3	468.3	514.8	592.9	565.7	686.8	611.9
3508.40	442.7	460.5	533.3	608.7	581.4	679.0	617.2
3540.80	495.2	505.0	557.0	627.1	602.2	726.0	643.5
3562.94	484.7	505.0	570.1	640.2	615.2	731.2	651.4
4102.94	589.6	704.1	872.1	914.0	933.0	993.2	874.1
4642.94	731.3	791.9	877.2	965.1	976.0	1075.	991.7
4937.78	665.7	722.4	866.9	970.2	963.4	988.1	904.8
4970.18	744.5	751.2	866.9	975.3	960.9	1021.	971.2
5002.58	775.2	781.7	872.1	998.3	971.0	1055.	1002.
5034.98	844.1	931.9	933.5	1045.	1035.	1168.	1041.
5067.38	823.7	878.4	979.5	1081.	1068.	1132.	1033.
5099.78	877.2	949.7	1018.	1110.	1096.	1173.	1072.

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	EGBERT 4/19/72				5-652
APR	SIMMONS 6/20/72				D2-80089
APR	Clober 6/20/72				PAGE:
CONTRACT NO.					F16.189

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TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
5132.18	912.9	990.4	1060.	1143.	1132.	1214.	1113.
5164.58	953.7	1011.	1091.	1172.	1160.	1240.	1144.
5196.98	953.7	1006.	1114.	1179.	1186.	1240.	1168.
5229.38	966.5	1014.	1135.	1185.	1209.	1240.	1170.
5261.78	971.6	1029.	1153.	1195.	1232.	1268.	1201.
5294.18	1002.	1060.	1176.	1210.	1255.	1276.	1201.
5326.58	1111.	1202.	1205.	1241.	1289.	1404.	1310.
5358.98	1049.	1109.	1238.	1272.	1312.	1340.	1261.
5380.58	1062.	1111.	1249.	1293.	1330.	1332.	1261.
5650.58	1144.	1202.	1342.	1391.	1430.	1435.	1388.
5682.98	1209.	1235.	1345.	1402.	1435.	1456.	1416.
5715.38	1237.	1274.	1376.	1438.	1463.	1471.	1432.
5747.78	1271.	1294.	1410.	1472.	1483.	1499.	1453.
5780.18	1297.	1318.	1435.	1508.	1504.	1521.	1491.
5812.58	1335.	1349.	1461.	1538.	1531.	1550.	1521.
5844.98	1372.	1387.	1487.	1570.	1552.	1574.	1561.
5877.38	1410.	1423.	1519.	1597.	1579.	1598.	1591.
5909.78	1428.	1436.	1543.	1624.	1600.	1625.	1625.
5942.18	1426.	1434.	1565.	1640.	1619.	1627.	1625.
5974.58	1410.	1418.	1567.	1642.	1627.	1609.	1607.
6006.98	1431.	1449.	1573.	1645.	1642.	1643.	1620.
6039.38	1426.	1462.	1586.	1650.	1656.	1643.	1617.
6071.78	1415.	1441.	1578.	1642.	1653.	1633.	1615.
6104.18	1423.	1444.	1573.	1637.	1648.	1641.	1625.
6136.58	1421.	1441.	1570.	1640.	1650.	1641.	1625.
6168.98	1421.	1436.	1567.	1642.	1653.	1633.	1620.
6201.38	1415.	1436.	1573.	1645.	1650.	1635.	1625.
6233.78	1421.	1434.	1573.	1645.	1653.	1630.	1620.
6266.18	1426.	1439.	1573.	1648.	1653.	1630.	1617.
6298.58	1410.	1436.	1573.	1645.	1650.	1627.	1615.
6330.98	1421.	1434.	1573.	1645.	1656.	1630.	1617.
6363.38	1436.	1439.	1573.	1645.	1656.	1630.	1617.
6395.78	1426.	1439.	1573.	1645.	1656.	1622.	1617.
6428.18	1436.	1444.	1573.	1648.	1653.	1625.	1620.
6460.58	1444.	1467.	1573.	1645.	1653.	1641.	1625.
6470.84	1428.	1457.	1578.	1648.	1656.	1649.	1623.
6487.04	1439.	1467.	1581.	1645.	1664.	1649.	1625.
6503.24	1431.	1459.	1584.	1648.	1664.	1649.	1628.
6519.44	1426.	1459.	1584.	1650.	1664.	1641.	1607.
6535.64	1413.	1454.	1586.	1648.	1664.	1635.	1612.
CALC	06/16/82		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/19/82					
APR	SHIMONO	6/29/82					
APR	Chen	6/29/82					
CONTRACT NO.					FIG. 190		

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POWER BUSINESS FORMS

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
6551.84	1436.	1457.	1584.	1650.	1666.	1649.	1628.
6568.04	1426.	1441.	1578.	1645.	1664.	1643.	1625.
6584.24	1436.	1454.	1576.	1645.	1664.	1646.	1625.
6600.44	1421.	1449.	1578.	1642.	1664.	1651.	1628.
6616.64	1428.	1454.	1578.	1645.	1664.	1643.	1625.
6632.84	1436.	1462.	1581.	1650.	1664.	1641.	1620.
6649.04	1441.	1459.	1581.	1650.	1664.	1646.	1625.
6665.24	1431.	1454.	1584.	1650.	1664.	1641.	1620.
6681.44	1428.	1452.	1578.	1650.	1664.	1646.	1620.
6697.64	1436.	1459.	1581.	1650.	1664.	1643.	1623.
6713.84	1444.	1462.	1581.	1650.	1664.	1646.	1620.
6730.04	1433.	1454.	1578.	1650.	1661.	1641.	1615.
6746.24	1431.	1452.	1581.	1648.	1664.	1641.	1620.
6762.44	1431.	1452.	1584.	1650.	1664.	1641.	1623.
6778.64	1426.	1444.	1581.	1650.	1661.	1641.	1620.
6794.84	1436.	1454.	1578.	1648.	1658.	1643.	1620.
6811.04	1415.	1444.	1578.	1645.	1656.	1649.	1625.
6827.24	1423.	1449.	1578.	1645.	1661.	1635.	1617.
6843.44	1423.	1439.	1578.	1645.	1658.	1638.	1617.
6859.64	1431.	1454.	1576.	1645.	1658.	1641.	1620.
6875.84	1428.	1449.	1576.	1648.	1658.	1641.	1620.
6892.04	1436.	1449.	1578.	1650.	1658.	1641.	1623.
6908.24	1421.	1444.	1576.	1645.	1656.	1635.	1615.
6924.44	1431.	1449.	1578.	1648.	1656.	1641.	1623.
6940.64	1413.	1436.	1576.	1648.	1656.	1638.	1617.
6956.84	1426.	1439.	1573.	1645.	1653.	1635.	1617.
6973.04	1410.	1434.	1573.	1645.	1656.	1638.	1620.
6989.24	1410.	1439.	1573.	1648.	1656.	1638.	1620.
7005.44	1426.	1452.	1573.	1645.	1653.	1633.	1615.
7021.64	1413.	1441.	1573.	1648.	1653.	1633.	1617.
7037.84	1413.	1444.	1576.	1650.	1653.	1627.	1615.
7054.04	1428.	1449.	1578.	1650.	1656.	1633.	1615.
7070.24	1423.	1444.	1578.	1650.	1653.	1630.	1612.
7626.44	547.7	620.3	918.1	926.8	1119.	899.3	835.7
8166.44	152.6	150.0	491.1	527.2	643.9	340.0	284.2
700	97.25	97.15	234.6	229.0	416.7	210.2	160.5

CALC	06/16/82	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	ECBERT 6/19/82				
APR	SHIMONO 6/29/82				D2-80001
APR	Choban 6/20/82				PAGE
CONTRACT NO.					FIG. 191

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
	-----DEGREES FAHRENHEIT-----						
.33	78.62	91.90	92.11	89.02	81.28	84.09	86.84
.87	81.31	91.90	86.85	86.37	81.28	86.72	84.21
33.27	81.31	94.54	94.75	91.67	81.28	86.72	84.21
65.67	81.31	94.54	100.0	96.98	78.58	86.72	84.21
98.07	81.31	94.54	92.11	91.67	81.28	84.09	84.21
130.47	81.31	94.54	160.5	136.7	81.28	86.72	86.84
162.87	83.95	113.0	212.8	181.6	86.56	92.00	92.10
195.27	83.95	136.8	286.2	231.7	89.21	99.91	102.6
227.67	86.60	173.6	348.6	273.8	94.49	110.5	113.2
260.07	97.16	218.2	397.4	347.4	113.0	128.9	128.9
292.47	123.6	260.2	455.1	441.6	155.3	144.7	144.7
324.87	155.3	319.4	541.5	531.3	207.8	165.7	168.3
357.27	186.8	368.4	554.6	544.5	255.1	191.9	194.5
389.67	220.9	416.8	583.4	565.6	292.3	212.9	215.4
422.07	231.4	453.6	520.6	436.3	286.8	239.1	241.5
454.47	241.9	485.2	546.8	436.3	286.8	267.9	265.1
486.87	257.6	524.6	607.0	483.8	284.1	297.4	294.4
519.27	265.5	561.4	651.5	523.4	286.8	327.3	324.2
521.97	265.5	564.0	656.7	523.4	284.1	330.0	326.9
1317.26	373.9	585.0	400.1	433.7	330.5	547.5	546.8
1857.26	409.0	537.7	523.2	499.6	406.5	523.9	533.7
2397.26	393.0	511.4	468.2	523.4	395.9	513.4	520.6
3281.60	398.5	511.4	447.3	470.6	432.8	513.4	520.6
3314.00	406.4	514.1	494.4	526.0	443.3	516.1	525.9
3346.40	424.8	532.5	538.9	562.9	469.6	521.3	525.9
3378.80	445.8	553.5	572.9	602.5	498.6	531.8	539.0
3411.20	472.1	577.1	588.6	607.8	527.5	544.9	552.1
3443.60	493.1	606.0	588.6	602.5	556.4	560.7	570.4
3476.00	522.1	629.7	627.9	652.6	588.0	573.8	586.1
3508.40	548.3	658.6	643.6	665.8	619.6	589.5	599.2
3540.80	577.3	687.5	664.6	700.1	648.5	605.3	614.9
3562.94	598.3	705.9	669.8	697.5	666.9	615.8	625.4
4102.94	732.3	1019.	855.2	806.6	761.3	915.3	952.1
4642.94	975.5	1003.	1005.	970.7	917.2	986.6	1018.
4937.78	929.5	967.6	895.9	875.8	871.2	996.8	1031.
4970.18	947.4	965.1	944.3	978.4	901.8	996.8	1037.
5002.58	975.5	977.8	931.6	975.8	947.8	1002.	1042.
5034.98	1004.	1076.	1108.	1059.	978.5	1038.	1085.
5067.38	1040.	1133.	1036.	1030.	1017.	1069.	1116.
5099.78	1066.	1169.	1111.	1085.	1053.	1103.	1142.

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGGER 6/19/72				D2-80001
APR	SHIMON 6/20/72				PAGE
APR	Clab 6/20/72				FIG 192
CONTRACT NO.					

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TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
5132.18	1097.	1213.	1145.	1113.	1095.	1131.	1171.
5164.58	1130.	1247.	1150.	1134.	1128.	1159.	1196.
5196.98	1174.	1270.	1155.	1157.	1165.	1180.	1217.
5229.38	1205.	1298.	1157.	1152.	1185.	1203.	1240.
5261.78	1234.	1316.	1206.	1191.	1209.	1224.	1261.
5294.18	1268.	1342.	1212.	1199.	1237.	1245.	1279.
5326.58	1299.	1376.	1225.	1339.	1263.	1281.	1307.
5358.98	1327.	1407.	1242.	1243.	1294.	1296.	1328.
5380.58	1345.	1417.	1255.	1248.	1310.	1314.	1348.
5650.58	1387.	1464.	1369.	1357.	1322.	1443.	1475.
5682.98	1394.	1466.	1379.	1381.	1343.	1454.	1485.
5715.38	1425.	1508.	1389.	1391.	1379.	1472.	1500.
5747.78	1459.	1540.	1405.	1425.	1418.	1495.	1527.
5780.18	1493.	1570.	1433.	1451.	1465.	1516.	1549.
5812.58	1525.	1594.	1464.	1495.	1496.	1540.	1578.
5844.98	1559.	1621.	1490.	1524.	1533.	1567.	1602.
5877.38	1597.	1650.	1503.	1538.	1571.	1594.	1629.
5909.78	1627.	1672.	1530.	1570.	1603.	1621.	1650.
5942.18	1659.	1685.	1516.	1557.	1627.	1642.	1674.
5974.58	1672.	1688.	1511.	1543.	1633.	1656.	1688.
6006.98	1672.	1696.	1564.	1557.	1625.	1674.	1707.
6039.38	1678.	1704.	1567.	1565.	1625.	1682.	1718.
6071.78	1672.	1693.	1548.	1551.	1619.	1685.	1718.
6104.18	1669.	1685.	1554.	1565.	1617.	1685.	1718.
6136.58	1667.	1680.	1548.	1554.	1622.	1688.	1715.
6168.98	1667.	1677.	1540.	1559.	1625.	1690.	1720.
6201.38	1667.	1677.	1546.	1565.	1625.	1693.	1726.
6233.78	1667.	1677.	1538.	1551.	1627.	1693.	1726.
6266.18	1667.	1677.	1535.	1554.	1627.	1696.	1726.
6298.58	1667.	1677.	1530.	1548.	1627.	1696.	1726.
6330.98	1667.	1677.	1538.	1554.	1625.	1698.	1732.
6363.38	1667.	1677.	1532.	1551.	1627.	1701.	1734.
6395.78	1669.	1677.	1527.	1551.	1625.	1701.	1729.
6428.18	1667.	1672.	1532.	1554.	1627.	1701.	1732.
6460.58	1669.	1677.	1564.	1559.	1633.	1701.	1729.
6470.84	1667.	1677.	1567.	1565.	1633.	1704.	1734.
6487.04	1672.	1682.	1567.	1567.	1635.	1707.	1734.
6503.24	1672.	1685.	1570.	1567.	1633.	1707.	1734.
6519.44	1669.	1688.	1556.	1548.	1633.	1710.	1734.
6535.64	1669.	1688.	1554.	1548.	1638.	1707.	1732.
CALC	06/16/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY		
CHECK	EGBERT	6/19/72					
APR	SHIMONO	6/20/72					
APR	Chabon	6/21/72					
CONTRACT NO.					PAGE		
					FIG. 193		

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-27
-----DEGREES FAHRENHEIT-----							
6551.84	1672.	1688.	1570.	1570.	1633.	1707.	1731.
6568.04	1669.	1685.	1559.	1565.	1627.	1707.	1731.
6584.24	1672.	1688.	1559.	1565.	1630.	1707.	1732.
6600.44	1672.	1690.	1570.	1575.	1635.	1707.	1739.
6616.64	1672.	1685.	1564.	1567.	1635.	1704.	1732.
6632.84	1672.	1688.	1562.	1565.	1638.	1704.	1732.
6649.04	1672.	1685.	1556.	1559.	1635.	1704.	1732.
6665.24	1669.	1685.	1554.	1565.	1635.	1704.	1729.
6681.44	1672.	1685.	1556.	1559.	1633.	1704.	1734.
6697.64	1672.	1685.	1559.	1565.	1633.	1704.	1734.
6713.84	1669.	1682.	1559.	1565.	1633.	1704.	1734.
6730.04	1672.	1682.	1554.	1557.	1635.	1704.	1734.
6746.24	1672.	1685.	1562.	1575.	1633.	1707.	1732.
6762.44	1672.	1685.	1554.	1557.	1635.	1704.	1734.
6778.64	1672.	1682.	1554.	1559.	1638.	1704.	1734.
6794.84	1672.	1680.	1556.	1567.	1638.	1707.	1732.
6811.04	1678.	1682.	1564.	1581.	1638.	1704.	1732.
6827.24	1672.	1682.	1546.	1557.	1638.	1704.	1734.
6843.44	1669.	1682.	1548.	1565.	1641.	1704.	1729.
6859.64	1672.	1680.	1554.	1565.	1643.	1704.	1732.
6875.84	1672.	1682.	1559.	1570.	1643.	1704.	1732.
6892.04	1672.	1682.	1554.	1575.	1646.	1707.	1729.
6908.24	1672.	1682.	1543.	1567.	1649.	1704.	1729.
6924.44	1672.	1682.	1554.	1581.	1652.	1701.	1729.
6940.64	1672.	1680.	1543.	1570.	1646.	1701.	1729.
6956.84	1672.	1680.	1540.	1570.	1646.	1701.	1729.
6973.04	1672.	1680.	1546.	1583.	1652.	1701.	1729.
6989.24	1672.	1677.	1540.	1575.	1652.	1701.	1729.
7005.44	1669.	1677.	1538.	1573.	1652.	1701.	1729.
7021.64	1672.	1680.	1543.	1575.	1652.	1701.	1729.
7037.84	1672.	1680.	1543.	1551.	1649.	1701.	1729.
7054.04	1669.	1680.	1538.	1565.	1646.	1701.	1729.
7070.24	1669.	1680.	1538.	1559.	1641.	1701.	1729.
7626.44	960.2	962.5	827.3	796.4	774.0	1232.	1238.
8166.44	532.6	535.1	204.9	208.0	538.0	757.2	758.7
00	*293.1	*216.0	*102.6	*107.6	*221.3	*518.0	*521.7

CALC	06/16/82	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/82				
APR	SHIMONO 6/29/82				D2-80081
APR	Chelies 6/20/82				PAGE.
CONTRACT NO.					FIG. 194

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
.33	83.92	83.91	81.43	81.92	78.62	78.79	76.00
.87	83.92	83.91	81.43	87.15	75.88	78.79	76.00
33.27	86.56	83.91	84.07	87.15	78.62	81.47	78.74
65.67	86.56	81.27	84.07	84.54	78.62	78.79	78.74
98.07	83.92	83.91	81.43	84.54	78.62	78.79	78.74
130.47	83.92	83.91	81.43	87.15	78.62	81.47	76.00
162.87	91.85	83.91	86.71	87.15	81.31	81.47	81.43
195.27	105.1	91.84	97.26	95.01	83.96	81.47	81.43
227.67	123.6	97.13	105.2	110.7	83.96	84.11	84.07
260.07	147.4	107.7	118.4	129.1	91.88	92.02	91.98
292.47	165.8	118.3	123.6	139.5	105.1	107.8	102.5
324.87	192.0	128.9	139.5	163.0	126.2	136.8	126.3
357.27	215.7	144.7	157.9	186.4	155.3	171.0	165.7
389.67	241.9	163.1	173.6	207.3	192.0	212.9	207.7
422.07	281.4	194.7	207.7	248.9	215.6	231.2	233.9
454.47	311.4	215.7	226.0	269.7	244.5	252.2	270.6
486.87	335.9	239.3	254.8	299.0	273.4	275.7	305.6
519.27	363.2	265.6	273.2	326.0	305.8	300.0	335.5
521.97	365.9	265.6	281.1	331.4	308.6	302.7	340.9
1317.26	527.5	522.3	437.4	529.2	398.4	368.0	392.6
1857.26	538.0	543.4	468.9	531.8	406.4	389.7	400.7
2397.26	514.4	530.2	463.7	518.8	409.0	378.8	406.0
3281.60	527.5	543.4	479.4	524.0	422.2	395.1	424.3
3314.00	538.0	559.1	500.4	563.1	430.0	408.4	434.8
3346.40	543.3	551.2	508.3	531.8	445.8	426.8	455.8
3378.80	580.1	580.2	542.4	573.5	472.1	453.0	487.3
3411.20	601.1	593.3	558.1	591.8	498.4	489.7	516.2
3443.60	627.4	619.6	584.4	615.2	527.3	515.9	542.4
3476.00	635.3	630.2	584.4	620.4	553.6	544.8	568.7
3508.40	632.7	630.2	579.1	623.0	579.9	573.6	592.3
3540.80	656.4	648.6	600.1	641.3	606.2	599.9	615.9
3562.94	669.5	664.4	610.6	654.3	624.6	618.2	631.7
4102.94	952.9	1012.	935.8	991.2	706.1	707.4	710.4
4642.94	1027.	1084.	1033.	1060.	898.9	904.8	864.5
4937.78	1046.	1113.	1064.	1083.	865.7	874.2	839.0
4970.18	1046.	1116.	1082.	1081.	873.3	887.0	849.2
5002.58	1074.	1134.	1103.	1109.	898.9	917.6	877.3
5034.98	1139.	1165.	1121.	1145.	924.4	945.6	905.3
5067.38	1170.	1183.	1139.	1173.	955.1	976.2	941.0
5099.78	1185.	1198.	1160.	1191.	985.7	1004.	966.5

CALC	06/16/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUV 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/62				
APR	SHIMONO 6/20/62				DZ-80081
APR	Chalera 6/20/62				PAGE
CONTRACT NO.					FIG. 195

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
5132.18	1209.	1219.	1178.	1217.	1019.	1038.	999.7
5164.58	1227.	1232.	1196.	1237.	1058.	1084.	1054.
5196.98	1232.	1237.	1206.	1242.	1110.	1133.	1106.
5229.38	1242.	1245.	1219.	1250.	1149.	1167.	1142.
5261.78	1258.	1253.	1235.	1265.	1185.	1203.	1180.
5294.18	1276.	1261.	1255.	1278.	1221.	1234.	1209.
5326.58	1304.	1279.	1284.	1304.	1257.	1268.	1240.
5358.98	1343.	1310.	1307.	1345.	1280.	1296.	1266.
5380.58	1364.	1328.	1335.	1368.	1299.	1317.	1284.
5650.58	1457.	1468.	1477.	1483.	1337.	1335.	1307.
5682.98	1465.	1473.	1483.	1491.	1350.	1348.	1323.
5715.38	1501.	1494.	1503.	1520.	1376.	1384.	1359.
5747.78	1539.	1520.	1530.	1552.	1407.	1415.	1384.
5780.18	1566.	1547.	1557.	1579.	1438.	1448.	1415.
5812.58	1587.	1574.	1581.	1600.	1469.	1482.	1446.
5844.98	1614.	1601.	1608.	1629.	1500.	1513.	1483.
5877.38	1641.	1625.	1635.	1656.	1538.	1556.	1514.
5909.78	1665.	1652.	1661.	1680.	1565.	1585.	1541.
5942.18	1684.	1676.	1685.	1707.	1600.	1615.	1573.
5974.58	1692.	1692.	1702.	1720.	1616.	1628.	1589.
6006.98	1700.	1700.	1713.	1726.	1624.	1631.	1586.
6039.38	1703.	1706.	1718.	1731.	1624.	1626.	1578.
6071.78	1692.	1706.	1716.	1726.	1613.	1612.	1568.
6104.18	1689.	1706.	1718.	1731.	1608.	1610.	1568.
6136.58	1697.	1711.	1730.	1737.	1605.	1604.	1562.
6168.98	1705.	1722.	1735.	1745.	1605.	1604.	1562.
6201.38	1708.	1725.	1738.	1745.	1602.	1604.	1562.
6233.78	1705.	1731.	1743.	1748.	1605.	1607.	1562.
6266.18	1711.	1731.	1746.	1748.	1602.	1607.	1560.
6298.58	1708.	1734.	1746.	1751.	1602.	1604.	1560.
6330.98	1711.	1734.	1749.	1754.	1602.	1604.	1562.
6363.38	1714.	1734.	1746.	1751.	1602.	1607.	1562.
6395.78	1711.	1739.	1752.	1754.	1605.	1607.	1560.
6428.18	1714.	1736.	1752.	1756.	1600.	1607.	1557.
6460.58	1711.	1736.	1749.	1754.	1597.	1607.	1557.
6470.84	1711.	1734.	1749.	1751.	1600.	1607.	1557.
6487.04	1711.	1734.	1746.	1748.	1602.	1610.	1557.
6503.24	1711.	1734.	1746.	1748.	1600.	1610.	1560.
6519.44	1711.	1731.	1743.	1748.	1602.	1610.	1560.
6535.64	1705.	1728.	1741.	1745.	1600.	1610.	1560.
CALC	06/16/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT 6/19/62				EWA NO. 05652 SPEC. 0301		
APR	SHIMONO 6/20/62				COND. NO. 01 RUN 01		
APR	Chobin 6/24/62				THE BOEING COMPANY		
CONTRACT NO.					EWA 5-652		
					DZ-80081		
					PAGE		
					FIG. 196		

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PIONEER BUSINESS FORMS

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
6551.84	1705.	1731.	1741.	1748.	1605.	1607.	1560.
6568.04	1705.	1725.	1738.	1745.	1602.	1607.	1560.
6584.24	1708.	1725.	1738.	1743.	1605.	1607.	1562.
6600.44	1708.	1725.	1738.	1745.	1605.	1610.	1565.
6616.64	1705.	1725.	1738.	1745.	1605.	1610.	1562.
6632.84	1705.	1728.	1741.	1745.	1608.	1610.	1562.
6649.04	1711.	1725.	1741.	1748.	1605.	1610.	1562.
6665.24	1711.	1731.	1741.	1751.	1605.	1610.	1562.
6681.44	1708.	1728.	1741.	1751.	1605.	1610.	1560.
6697.64	1711.	1728.	1746.	1751.	1605.	1610.	1562.
6713.84	1711.	1731.	1746.	1754.	1605.	1612.	1562.
6730.04	1714.	1734.	1746.	1751.	1605.	1610.	1562.
6746.24	1714.	1734.	1746.	1754.	1605.	1612.	1562.
6762.44	1711.	1734.	1746.	1754.	1605.	1610.	1560.
6778.64	1714.	1734.	1749.	1754.	1602.	1610.	1560.
6794.84	1714.	1734.	1746.	1754.	1602.	1610.	1557.
6811.04	1714.	1734.	1746.	1751.	1602.	1610.	1557.
6827.24	1714.	1728.	1746.	1751.	1605.	1607.	1557.
6843.44	1711.	1728.	1746.	1751.	1600.	1607.	1557.
6859.64	1708.	1728.	1746.	1748.	1600.	1607.	1557.
6875.84	1708.	1728.	1743.	1748.	1602.	1607.	1557.
6892.04	1711.	1728.	1746.	1751.	1605.	1607.	1557.
6908.24	1708.	1728.	1741.	1745.	1600.	1610.	1557.
6924.44	1708.	1728.	1743.	1745.	1602.	1610.	1557.
6940.64	1711.	1725.	1743.	1748.	1602.	1607.	1557.
6956.84	1708.	1728.	1741.	1748.	1597.	1602.	1557.
6973.04	1708.	1728.	1741.	1745.	1600.	1604.	1557.
6989.24	1708.	1731.	1746.	1748.	1600.	1604.	1557.
7005.44	1711.	1725.	1741.	1748.	1600.	1602.	1552.
7021.64	1711.	1731.	1741.	1745.	1597.	1604.	1557.
7037.84	1708.	1728.	1741.	1745.	1600.	1604.	1557.
7054.04	1714.	1725.	1743.	1745.	1602.	1607.	1560.
7070.24	1711.	1728.	1741.	1745.	1600.	1604.	1557.
7626.44	1172.	1237.	1245.	1219.	998.5	955.8	971.6
8166.44	716.9	776.7	782.9	755.8	587.8	544.8	584.4
800	*491.1	*549.3	*549.9	*526.6	*353.2	*317.2	*549.9

CALC	06/16/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/62				
APR	SHIMONO 6/20/62				
APR	Chloe 6/20/2				02-80081
CONTRACT NO.					PAGE 7
					FIG. 197

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
.33	76.16	86.43	88.54	88.54	93.33	81.24	81.25
.87	78.90	86.43	86.26	88.54	91.07	78.54	78.55
33.27	78.90	88.70	86.26	90.82	88.80	81.24	81.25
65.67	78.90	88.70	88.54	93.10	93.33	81.24	81.25
98.07	78.90	88.70	88.54	97.65	95.60	83.88	83.89
130.47	76.16	86.43	88.54	106.8	102.4	86.53	89.18
162.87	78.90	88.70	90.81	143.2	122.8	102.4	99.76
195.27	78.90	93.24	90.81	188.5	154.5	126.2	120.9
227.67	76.16	93.24	93.09	224.6	183.8	150.0	147.4
260.07	81.57	100.1	97.64	245.0	210.8	176.3	171.0
292.47	92.10	111.4	111.3	222.4	208.6	186.8	181.5
324.87	105.3	125.0	140.9	204.3	201.8	186.8	189.4
357.27	131.6	143.2	177.1	204.3	197.3	192.1	194.7
389.67	170.9	163.5	208.8	204.3	199.6	197.3	197.3
422.07	202.3	170.3	226.9	302.4	240.1	228.8	226.2
454.47	244.2	186.1	249.5	400.9	341.4	303.3	292.4
486.87	288.9	206.4	272.2	384.5	344.1	330.5	322.4
519.27	329.7	226.7	290.7	386.9	360.1	357.8	355.1
521.97	329.7	229.0	290.7	386.9	360.1	357.8	355.1
1317.26	381.2	316.0	328.2	365.7	374.2	472.5	469.8
1857.26	375.8	320.7	342.3	347.0	364.8	464.6	464.5
2397.26	392.1	330.0	335.3	379.8	381.2	461.9	459.3
3281.60	408.1	344.1	351.7	379.8	378.8	464.6	461.9
3314.00	415.9	355.8	363.4	393.9	388.2	469.8	469.8
3346.40	439.5	367.5	389.2	420.1	411.2	488.2	482.9
3378.80	463.1	381.5	412.3	457.5	433.7	506.7	504.0
3411.20	494.5	402.5	439.5	473.4	451.7	525.1	522.4
3443.60	520.7	411.6	459.8	493.8	472.0	543.5	540.8
3476.00	541.6	429.6	487.0	514.1	492.3	567.2	564.5
3508.40	565.2	450.0	507.4	532.3	510.4	590.9	585.6
3540.80	588.8	495.1	530.1	550.4	528.4	611.9	611.9
3562.94	604.5	492.9	543.6	541.3	532.9	622.4	619.8
4102.94	669.9	553.9	625.2	561.7	564.5	675.1	627.7
4642.94	791.8	703.0	774.0	782.7	784.5	897.1	899.6
4937.78	776.5	689.4	747.5	767.3	771.4	922.7	922.6
4970.18	784.2	696.2	763.0	815.7	799.9	940.6	940.5
5002.58	804.5	707.5	789.4	934.6	872.2	999.4	989.1
5034.98	822.3	723.3	815.8	969.8	929.2	1054.	1049.
5067.38	852.9	743.6	842.2	974.2	948.9	1098.	1093.
5099.78	878.3	765.8	864.2	987.4	962.1	1129.	1129.
CALC	06/16/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	ESBERT 6/19/62				EWA NO. 05652 SPEC. 0301		
APR	SHIMONO 6/20/62				COND. NO. 01 RUN 01		
APR	Choban 6/20/62				THE BOEING COMPANY		
CONTRACT NO.					FIG. 198		

TIME SEC.	8-10 T-37	7-9 T-38	7-11 T-39	7-13 T-40	7-15 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
5132.18	906.3	789.9	895.1	1014.	988.4	1160.	1160.
5164.58	962.3	829.4	939.1	1034.	1010.	1188.	1186.
5196.98	1016.	873.8	985.8	1061.	1037.	1220.	1217.
5229.38	1055.	908.4	1012.	1079.	1057.	1248.	1248.
5261.78	1101.	947.9	1048.	1103.	1079.	1279.	1276.
5294.18	1134.	978.7	1074.	1128.	1101.	1305.	1305.
5326.58	1160.	1005.	1101.	1154.	1128.	1339.	1339.
5358.98	1186.	1030.	1123.	1170.	1146.	1365.	1362.
5380.58	1207.	1050.	1143.	1186.	1157.	1383.	1380.
5650.58	1238.	1081.	1146.	1186.	1175.	1398.	1403.
5682.98	1253.	1090.	1166.	1212.	1192.	1414.	1414.
5715.38	1287.	1114.	1199.	1246.	1221.	1440.	1437.
5747.78	1312.	1138.	1228.	1279.	1250.	1468.	1465.
5780.18	1338.	1163.	1255.	1306.	1277.	1497.	1491.
5812.58	1374.	1187.	1284.	1330.	1301.	1526.	1526.
5844.98	1408.	1219.	1320.	1359.	1326.	1561.	1555.
5877.38	1439.	1245.	1344.	1384.	1354.	1588.	1585.
5909.78	1470.	1274.	1379.	1411.	1379.	1620.	1615.
5942.18	1501.	1303.	1395.	1433.	1390.	1639.	1636.
5974.58	1519.	1319.	1416.	1355.	1379.	1642.	1641.
6006.98	1522.	1321.	1400.	1402.	1383.	1647.	1647.
6039.38	1511.	1316.	1391.	1397.	1386.	1650.	1650.
6071.78	1498.	1307.	1377.	1377.	1383.	1650.	1650.
6104.18	1493.	1303.	1380.	1377.	1386.	1650.	1647.
6136.58	1493.	1301.	1380.	1400.	1383.	1652.	1650.
6168.98	1490.	1294.	1373.	1377.	1383.	1652.	1650.
6201.38	1488.	1296.	1377.	1395.	1381.	1652.	1647.
6233.78	1490.	1296.	1377.	1395.	1381.	1647.	1644.
6266.18	1490.	1294.	1375.	1395.	1381.	1650.	1647.
6298.58	1485.	1296.	1377.	1395.	1381.	1647.	1647.
6330.98	1488.	1294.	1373.	1395.	1381.	1647.	1647.
6363.38	1488.	1294.	1380.	1397.	1381.	1652.	1647.
6395.78	1485.	1296.	1380.	1395.	1381.	1650.	1647.
6428.18	1485.	1294.	1380.	1395.	1381.	1652.	1647.
6460.58	1485.	1294.	1382.	1395.	1381.	1647.	1647.
6470.84	1488.	1292.	1377.	1395.	1383.	1647.	1650.
6487.04	1485.	1296.	1382.	1400.	1383.	1652.	1650.
6503.24	1488.	1296.	1382.	1400.	1388.	1652.	1652.
6519.44	1488.	1294.	1380.	1400.	1386.	1652.	1652.
6535.64	1488.	1296.	1382.	1397.	1386.	1652.	1650.

CALC	06/16/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/52				
APR	SHIMONO 6/20/52				D2-90081
APR	Cholera 6/20/52				
CONTRACT NO.					FIG. 199

31836

2/7

TIME SEC.	8-10 T-37	8-11 T-38	8-12 T-39	8-13 T-40	8-14 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
6551.84	1488.	1296.	1373.	1400.	1380.	1652.	1652.
6568.04	1488.	1294.	1375.	1400.	1383.	1655.	1652.
6584.24	1490.	1296.	1377.	1400.	1383.	1652.	1652.
6600.44	1488.	1296.	1380.	1397.	1386.	1652.	1652.
6616.64	1488.	1296.	1375.	1400.	1386.	1652.	1650.
6632.84	1485.	1296.	1380.	1397.	1383.	1652.	1650.
6649.04	1485.	1296.	1382.	1397.	1386.	1652.	1647.
6665.24	1488.	1294.	1382.	1397.	1386.	1652.	1650.
6681.44	1488.	1296.	1384.	1397.	1383.	1652.	1650.
6697.64	1488.	1294.	1382.	1400.	1386.	1652.	1647.
6713.84	1490.	1296.	1362.	1397.	1386.	1650.	1652.
6730.04	1488.	1296.	1364.	1400.	1386.	1652.	1652.
6746.24	1488.	1296.	1382.	1400.	1386.	1652.	1650.
6762.44	1485.	1294.	1380.	1397.	1383.	1647.	1652.
6778.64	1485.	1294.	1382.	1400.	1386.	1652.	1652.
6794.84	1485.	1294.	1380.	1400.	1386.	1652.	1652.
6811.04	1485.	1294.	1377.	1402.	1386.	1652.	1652.
6827.24	1485.	1294.	1375.	1400.	1386.	1652.	1650.
6843.44	1482.	1292.	1373.	1397.	1386.	1652.	1647.
6859.64	1480.	1292.	1373.	1400.	1383.	1652.	1652.
6875.84	1480.	1294.	1377.	1400.	1383.	1652.	1652.
6892.04	1480.	1292.	1375.	1400.	1386.	1652.	1652.
6908.24	1482.	1294.	1375.	1400.	1386.	1652.	1650.
6924.44	1485.	1292.	1373.	1400.	1383.	1652.	1647.
6940.64	1480.	1290.	1373.	1400.	1386.	1652.	1652.
6956.84	1480.	1290.	1369.	1400.	1383.	1652.	1652.
6973.04	1477.	1296.	1373.	1400.	1383.	1652.	1650.
6989.24	1477.	1287.	1373.	1400.	1386.	1652.	1652.
7005.44	1477.	1287.	1371.	1400.	1383.	1652.	1650.
7021.64	1477.	1287.	1373.	1400.	1383.	1796.	1652.
7037.84	1480.	1290.	1373.	1397.	1383.	1652.	1647.
7054.04	1480.	1290.	1373.	1397.	1381.	1652.	1650.
7070.24	1482.	1287.	1377.	1395.	1381.	1650.	1650.
7626.44	962.3	853.6	818.0	884.0	733.7	989.2	991.6
8166.44	583.5	515.5	471.2	437.0	376.5	525.1	527.7
700	*355.2	*356.3	*306.8	*197.4	*216.3	*293.7	*298.7

CALC	06/16/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	ECBERT	6/19/62				
APR	SHIMONO	6/20/62				D2-80081
APR	Cholera	6/20/62				PAC
CONTRACT NO.						FIG. 200

U6 5533 7450

2-5000

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
.33	81.27	79.01
.87	75.83	81.67
33.27	78.58	81.67
65.67	81.27	84.30
98.07	83.92	89.56
130.47	89.20	102.7
162.87	107.7	139.5
195.27	136.8	189.2
227.67	165.8	231.0
260.07	197.3	249.2
292.47	213.0	220.5
324.87	215.7	207.5
357.27	226.2	207.5
389.67	239.3	215.3
422.07	273.5	332.1
454.47	365.9	439.1
486.87	385.0	431.2
519.27	406.5	439.1
521.97	406.5	441.7
1317.26	417.1	399.8
1857.26	427.6	389.0
2397.26	417.1	410.3
3281.60	427.6	415.5
3314.00	443.4	433.8
3346.40	474.9	475.7
3378.80	506.5	512.3
3411.20	532.8	530.6
3443.60	559.1	556.7
3476.00	585.4	575.0
3508.40	609.1	598.6
3540.80	632.7	616.9
3562.94	638.0	606.4
4102.94	632.7	669.2
4642.94	909.5	884.9
4937.78	896.7	864.6
4970.18	927.4	910.3
5002.58	1007.	1043.
5034.98	1074.	1082.
5067.38	1110.	1087.
5099.78	1134.	1102.

CALC	06/11/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 4/19/72				
APR	SHIMODA 6/29/72				
APR	Cholera 6/29/72				
CONTRACT NO.					PAGE FIG. 201

U6 5553 7450

2-5000

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TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
5132.18	1162.	1136.
5164.58	1196.	1161.
5196.98	1232.	1192.
5229.38	1258.	1210.
5261.78	1284.	1236.
5294.18	1312.	1262.
5326.58	1346.	1295.
5358.98	1367.	1306.
5380.58	1382.	1321.
5650.58	1374.	1318.
5682.98	1395.	1344.
5715.38	1434.	1383.
5747.78	1467.	1416.
5780.18	1499.	1442.
5812.58	1531.	1475.
5844.98	1563.	1509.
5877.38	1598.	1536.
5909.78	1627.	1565.
5942.18	1646.	1576.
5974.58	1638.	1555.
6006.98	1638.	1563.
6039.38	1633.	1560.
6071.78	1627.	1557.
6104.18	1625.	1557.
6136.58	1627.	1557.
6168.98	1625.	1557.
6201.38	1625.	1552.
6233.78	1622.	1555.
6266.18	1622.	1555.
6298.58	1619.	1552.
6330.98	1625.	1555.
6363.38	1625.	1557.
6395.78	1625.	1555.
6428.18	1625.	1555.
6460.58	1625.	1563.
6470.84	1622.	1560.
6487.04	1625.	1563.
6503.24	1625.	1565.
6519.44	1627.	1563.
6535.64	1625.	1565.

CALC	06/16/82		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT	4/19/82				
APR	SHIMONO	6/20/82				
APR	Cholera	6/24/82				DZ-80061
						PAG
CONTRACT NO.						FIG. 202

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
6551.84	1625.	1563.
6568.04	1627.	1563.
6584.24	1627.	1563.
6600.44	1625.	1563.
6616.64	1625.	1563.
6632.84	1625.	1565.
6649.04	1625.	1565.
6665.24	1625.	1563.
6681.44	1625.	1563.
6697.64	1625.	1565.
6713.84	1627.	1563.
6730.04	1627.	1565.
6746.24	1627.	1563.
6762.44	1625.	1563.
6778.64	1625.	1565.
6794.84	1625.	1563.
6811.04	1627.	1563.
6827.24	1627.	1563.
6843.44	1625.	1563.
6859.64	1625.	1563.
6875.84	1627.	1563.
6892.04	1630.	1563.
6908.24	1627.	1563.
6924.44	1627.	1563.
6940.64	1630.	1563.
6956.84	1627.	1560.
6973.04	1627.	1560.
6989.24	1627.	1563.
7005.44	1627.	1563.
7021.64	1627.	1560.
7037.84	1625.	1557.
7054.04	1627.	1557.
7070.24	1625.	1557.
7626.44	873.7	790.9
8166.44	453.9	389.0

~~.00~~ ~~*231.9~~ ~~*207.0~~

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/72				02-80081
APR	SHIMONO 6/20/72				
APR	Cholera 6/20/72				
CONTRACT NO.					PAGE 2 FIG. 203

TIME SEC.	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	-----DEGREES FAHRENHEIT-----	
.33	75.85	78.48	78.60	84.27		
.87	75.85	75.73	78.60	81.64		
33.27	78.60	75.73	81.30	78.97		
65.67	78.60	78.48	83.94	84.27		
98.07	78.60	78.48	89.22	86.90		
130.47	75.85	78.48	99.79	94.78		
162.87	78.60	81.18	142.1	118.4		
195.27	83.94	81.18	194.6	155.2		
227.67	83.94	83.83	236.7	189.2		
260.07	91.86	89.12	260.3	220.6		
292.47	105.1	105.0	234.0	217.9		
324.87	120.9	139.4	213.0	210.1		
357.27	142.1	181.6	213.0	204.9		
389.67	165.8	218.4	213.0	207.5		
422.07	173.6	239.4	327.7	254.5		
454.47	192.0	265.7	440.6	372.9		
486.87	215.7	292.5	422.2	378.3		
519.27	239.3	314.3	424.9	394.6		
551.97	241.9	314.3	424.9	394.6		
584.26	344.0	358.0	401.2	410.4		
616.56	349.5	374.4	379.4	400.0		
648.86	360.4	366.2	417.0	418.3		
681.16	376.7	385.3	417.0	415.7		
713.46	390.3	398.9	432.8	426.1		
745.76	403.8	427.9	472.2	452.3		
778.06	419.6	454.3	506.4	478.5		
810.36	443.3	485.9	524.8	499.4		
842.66	453.8	509.6	548.4	522.9		
874.96	474.8	541.2	572.1	546.5		
907.26	498.5	564.9	593.1	567.4		
939.56	551.1	591.2	614.2	588.3		
971.86	548.4	607.0	603.7	593.6		
1004.16	619.4	701.9	627.3	630.2		
1036.46	791.3	872.1	881.2	882.7		
1068.76	776.4	841.4	863.3	867.5		
1101.06	784.1	859.3	919.5	900.5		
1133.36	796.9	890.0	1058.	984.4		
1165.66	814.8	920.7	1100.	1051.		
1197.96	837.7	951.5	1105.	1074.		
1230.26	863.3	977.1	1120.	1090.		
CALC	06/16/2		REVISED	DATE		
CHECK	EGBERT	7/5/62			CORRUGATED SHEAR WEB PANEL	
APR					EWA NO. 05652 SPEC. 0301	
APR					COND. NO. 01 RUN 01	
					THE BOEING COMPANY	
CONTRACT NO.					PAGE	
					FIG. 204	

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POWER BUSINESS FORMS

TIME SEC.	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	-----DEGREES FAHRENHEIT-----	
5132.18	891.4	1013.	1151.	1121.		
5164.58	937.4	1065.	1175.	1146.		
5196.98	988.5	1119.	1206.	1177.		
5229.38	1030.	1150.	1226.	1201.		
5261.78	1076.	1192.	1255.	1226.		
5294.18	1113.	1223.	1283.	1252.		
5326.58	1144.	1254.	1314.	1283.		
5358.98	1172.	1280.	1333.	1304.		
5380.58	1195.	1303.	1351.	1316.		
5650.58	1232.	1306.	1351.	1337.		
5682.73	1242.	1329.	1382.	1358.		
5715.58	1270.	1368.	1421.	1391.		
5747.78	1299.	1402.	1459.	1425.		
5780.18	1327.	1433.	1490.	1455.		
5812.58	1356.	1467.	1520.	1484.		
5844.98	1392.	1508.	1554.	1513.		
5877.38	1423.	1538.	1584.	1547.		
5909.78	1457.	1568.	1616.	1577.		
5942.18	1490.	1600.	1619.	1590.		
5974.58	1509.	1613.	1597.	1577.		
6006.98	1512.	1605.	1605.	1582.		
6039.38	1506.	1594.	1600.	1585.		
6071.78	1496.	1578.	1600.	1582.		
6104.18	1490.	1581.	1600.	1585.		
6136.58	1488.	1581.	1603.	1582.		
6168.98	1483.	1573.	1600.	1582.		
6201.38	1483.	1578.	1597.	1579.		
6233.78	1483.	1578.	1597.	1579.		
6266.18	1480.	1576.	1597.	1579.		
6298.58	1483.	1578.	1597.	1579.		
6330.98	1480.	1573.	1597.	1579.		
6363.38	1480.	1581.	1600.	1579.		
6395.78	1483.	1581.	1597.	1579.		
6428.18	1480.	1581.	1597.	1579.		
6460.58	1480.	1584.	1597.	1579.		
6470.94	1477.	1578.	1597.	1582.		
6487.94	1483.	1584.	1603.	1582.		
6503.24	1483.	1584.	1603.	1587.		
6517.94	1480.	1581.	1603.	1585.		
6535.64	1483.	1584.	1600.	1585.		
C.A.C.	06/16/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL	
CHECK	EGBERT 7/5/72				EWA NO. 05652	SPEC. 0301
APR					COND. NO. 01	RUN 01
APR					THE BOEING COMPANY	
CONTRACT NO.					EWA 5-652	
					D2-80081	
					PAGE	
					FIG. 205	

TIME SEC.	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41
-----DEGREES FAHRENHEIT-----				
6551.84	1483.	1573.	1603.	1587.
6568.04	1480.	1576.	1603.	1582.
6584.24	1483.	1578.	1603.	1582.
6600.44	1483.	1581.	1600.	1585.
6616.64	1483.	1576.	1603.	1585.
6632.84	1483.	1581.	1600.	1582.
6649.04	1483.	1584.	1600.	1585.
6665.24	1480.	1584.	1600.	1585.
6681.44	1483.	1586.	1600.	1582.
6697.64	1483.	1584.	1603.	1585.
6713.84	1483.	1584.	1600.	1585.
6730.04	1483.	1586.	1603.	1585.
6746.24	1485.	1584.	1603.	1585.
6762.44	1480.	1581.	1600.	1582.
6778.64	1480.	1584.	1603.	1585.
6794.84	1480.	1581.	1603.	1585.
6811.04	1480.	1578.	1605.	1585.
6827.24	1480.	1576.	1603.	1585.
6843.44	1477.	1573.	1600.	1585.
6859.64	1477.	1573.	1603.	1582.
6875.84	1480.	1578.	1603.	1582.
6892.04	1477.	1576.	1603.	1585.
6908.24	1480.	1576.	1603.	1585.
6924.44	1477.	1573.	1603.	1582.
6940.64	1475.	1573.	1603.	1585.
6956.84	1475.	1568.	1603.	1582.
6973.04	1475.	1573.	1603.	1582.
6989.24	1472.	1573.	1603.	1585.
7005.44	1472.	1570.	1603.	1582.
7021.64	1472.	1573.	1603.	1582.
7037.84	1475.	1573.	1600.	1582.
7054.04	1475.	1573.	1600.	1579.
7070.24	1472.	1578.	1597.	1579.
7086.44	1498.	1578.	1597.	1582.
7626.44	965.5	923.3	768.8	824.3
8166.44	574.7	522.8	368.5	413.1

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 7/5/72				
APR					
APR					
CONTRACT NO.					PAGE FIG. 206

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POLICE BUSINESS FORM

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
.33	0.041-	0.001	0.049-	0.010	0.000		0.008
.87	0.055-	0.006-	0.044-	0.020	0.003	0.023-	0.006
33.27	0.039-	0.001	0.036-	0.005	0.003	0.021-	0.008
65.67	0.059-	0.006-	0.046-	0.025	0.003	0.023-	0.012
98.07	0.047-	0.008-	0.044-	0.020	0.003	0.025-	0.008
130.47	0.041-	0.002-	0.046-	0.020	0.000	0.023-	0.012
162.87	0.041-	0.002-	0.048-	0.018	0.007	0.025-	0.006
195.27	0.033-	0.006-	0.044-	0.029	0.007	0.019-	0.008
227.67	0.027-	0.002-	0.046-	0.029	0.009	0.013-	0.005
260.07	0.035-	0.013	0.044-	0.030	0.012	0.011-	0.012
292.47	0.043-	0.001	0.042-	0.036	0.011	0.019-	0.008
324.87	0.037-	0.015	0.038-	0.039	0.014	0.017-	0.012
357.27	0.037-	0.017	0.040-	0.047	0.011	0.019-	0.012
389.67	0.025-	0.024	0.035-	0.056	0.011	0.017-	0.008
422.07	0.053-	0.028	0.035-	0.058	0.016	0.015-	0.003
454.47	0.035-	0.032	0.033-	0.059	0.023	0.021-	0.008
486.87	0.041-	0.032	0.033-	0.070	0.022	0.019-	0.006
519.27	0.035-	0.034	0.033-	0.072	0.020	0.025-	0.012
521.97	0.035-	0.034	0.035-	0.069	0.023	0.032-	0.006
1317.26	0.031-	0.045	0.035-	0.090	0.022	0.027-	0.015
1857.26	0.035-	0.051	0.036-	0.096	0.020	0.029-	0.015
2397.26	0.035-	0.051	0.038-	0.088	0.022	0.032-	0.015
3281.60	0.037-	0.060	0.038-	0.101	0.020	0.038-	0.013
3314.00	0.041-	0.064	0.038-	0.101	0.018	0.042-	0.015
3346.40	0.037-	0.066	0.033-	0.105	0.018	0.036-	0.012
3378.80	0.035-	0.070	0.035-	0.101	0.025	0.046-	0.012
3411.20	0.039-	0.081	0.035-	0.112	0.027	0.044-	0.013
3443.60	0.035-	0.074	0.029-	0.116	0.033	0.048-	0.012
3476.00	0.035-	0.089	0.027-	0.127	0.031	0.046-	0.015
3508.40	0.035-	0.093	0.033-	0.127	0.033	0.048-	0.015
3540.80	0.035-	0.096	0.025-	0.134	0.036	0.048-	0.010
3562.94	0.027-	0.104	0.027-	0.134	0.033	0.054-	0.015
4102.94	0.039-	0.115	0.016-	0.165	0.034	0.034-	0.018
4642.94	0.047-	0.148	0.025-	0.186	0.047	0.061-	0.020
4937.78	0.049-	0.150	0.033-	0.196	0.044	0.071-	0.020
4970.18	0.053-	0.159	0.033-	0.203	0.051	0.067-	0.025
5002.58	0.053-	0.161	0.029-	0.205	0.055	0.069-	0.017
5034.98	0.053-	0.165	0.031-	0.219	0.060	0.067-	0.018
5067.38	0.049-	0.176	0.027-	0.232	0.069	0.069-	0.018
5099.78	0.055-	0.178	0.027-	0.237	0.066	0.073-	0.020

CALC	06/16/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/2				
APR	SHIMONO 6/24/2				D2-80081
APR	Choban 6/20/2				PAGE 103
CONTRACT NO.					FIG. 2.07

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TIME SEC.	1-2 0-01	5-2 0-02	6-2 0-03	1-3 0-04	2-3 0-05	5-3 0-06	6-3 0-07
-----INCHES-----							
5132.18	0.051-	0.184	0.022-	0.243	0.064	0.077-	0.020
5164.58	0.051-	0.193	0.020-	0.254	0.064	0.081-	0.024
5196.98	0.047-	0.208	0.020-	0.265	0.069	0.083-	0.020
5229.38	0.051-	0.216	0.014-	0.266	0.071	0.086-	0.025
5261.78	0.043-	0.222	0.011-	0.281	0.069	0.086-	0.025
5294.18	0.045-	0.233	0.011-	0.283	0.077	0.090-	0.027
5326.58	0.043-	0.243	0.007-	0.295	0.073	0.096-	0.029
5358.98	0.043-	0.254	0.007-	0.303	0.077	0.100-	0.029
5380.58	0.047-	0.260	0.007-	0.314	0.077	0.094-	0.029
5650.58	0.055-	0.279	0.014-	0.341	0.077	0.104-	0.036
5682.98	0.059-	0.284	0.014-	0.348	0.082	0.108-	0.029
5715.38	0.059-	0.298	0.016-	0.359	0.082	0.110-	0.030
5747.78	0.063-	0.305	0.016-	0.377	0.084	0.115-	0.032
5780.18	0.061-	0.321	0.022-	0.381	0.086	0.121-	0.032
5812.58	0.071-	0.324	0.018-	0.392	0.088	0.115-	0.032
5844.98	0.071-	0.343	0.016-	0.412	0.091	0.123-	0.027
5877.38	0.075-	0.349	0.022-	0.417	0.089	0.129-	0.029
5909.78	0.075-	0.359	0.027-	0.435	0.091	0.131-	0.025
5942.18	0.077-	0.370	0.024-	0.441	0.093	0.135-	0.025
5974.58	0.077-	0.381	0.033-	0.441	0.088	0.146-	0.027
6006.98	0.089-	0.387	0.031-	0.451	0.088	0.143-	0.022
6039.38	0.081-	0.383	0.038-	0.455	0.089	0.146-	0.025
6071.78	0.087-	0.379	0.035-	0.455	0.089	0.146-	0.022
6104.18	0.083-	0.387	0.036-	0.455	0.082	0.148-	0.029
6136.58	0.096-	0.391	0.038-	0.459	0.088	0.154-	0.027
6168.98	0.091-	0.387	0.038-	0.457	0.088	0.158-	0.025
6201.38	0.091-	0.396	0.044-	0.461	0.082	0.158-	0.027
6233.78	0.094-	0.396	0.040-	0.459	0.089	0.162-	0.025
6266.18	0.096-	0.400	0.042-	0.470	0.093	0.160-	0.024
6298.58	0.093-	0.404	0.048-	0.466	0.088	0.168-	0.027
6330.98	0.096-	0.396	0.044-	0.466	0.088	0.164-	0.025
6363.38	0.098-	0.404	0.040-	0.473	0.082	0.168-	0.025
6395.78	0.098-	0.400	0.044-	0.471	0.084	0.166-	0.024
6428.18	0.091-	0.408	0.044-	0.477	0.088	0.168-	0.025
6460.58	0.094-	0.412	0.051-	0.475	0.084	0.175-	0.025
6470.84	0.100-	0.408	0.049-	0.477	0.088	0.168-	0.029
6487.04	0.118-	0.408	0.064-	0.479	0.078	0.172-	0.020
6503.24	0.116-	0.406	0.059-	0.481	0.084	0.179-	0.022
6519.44	0.128-	0.396	0.075-	0.481	0.080	0.170-	0.018
6535.64	0.140-	0.393	0.083-	0.477	0.073	0.177-	0.017
CALC	06/16/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL			
CHECK	EGBERT 6/19/62			EWA NO. 05652 SPEC. 0301			
APR	SHIMONO 6/20/62			COND. NO. 01 RUN 01			
APR	Chabon 6/20/62			THE BOEING COMPANY			
CONTRACT NO.				FIG. 208			

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
6551.84	0.152-	0.387	0.090-	0.475	0.071	0.170-	0.008
6568.04	0.164-	0.389	0.103-	0.471	0.071	0.164-	0.003
6584.24	0.168-	0.387	0.112-	0.468	0.069	0.168-	0.006
6600.44	0.182-	0.383	0.121-	0.468	0.064	0.168-	0.005
6616.64	0.180-	0.381	0.125-	0.471	0.075	0.168-	0.006
6632.84	0.166-	0.396	0.108-	0.479	0.077	0.177-	0.005
6649.04	0.134-	0.412	0.081-	0.488	0.077	0.177-	0.017
6665.24	0.130-	0.412	0.068-	0.491	0.077	0.187-	0.013
6681.44	0.122-	0.419	0.066-	0.497	0.073	0.191-	0.017
6697.64	0.144-	0.408	0.095-	0.482	0.071	0.179-	0.012
6713.84	0.182-	0.385	0.127-	0.470	0.071	0.172-	0.005
6730.04	0.189-	0.387	0.136-	0.468	0.069	0.173-	0.001-
6746.24	0.207-	0.378	0.153-	0.464	0.069	0.173-	0.000
6762.44	0.221-	0.374	0.162-	0.462	0.064	0.170-	0.005-
6778.64	0.239-	0.360	0.182-	0.455	0.060	0.168-	0.005-
6794.84	0.257-	0.362	0.201-	0.457	0.064	0.166-	0.007-
6811.04	0.257-	0.366	0.204-	0.451	0.062	0.172-	0.008-
6827.24	0.276-	0.353	0.219-	0.450	0.062	0.162-	0.010-
6843.44	0.284-	0.351	0.223-	0.451	0.060	0.168-	0.008-
6859.64	0.290-	0.351	0.236-	0.446	0.058	0.162-	0.010-
6875.84	0.296-	0.353	0.238-	0.446	0.060	0.160-	0.008-
6892.04	0.312-	0.353	0.250-	0.441	0.060	0.162-	0.010-
6908.24	0.322-	0.351	0.271-	0.437	0.055	0.162-	0.012-
6924.44	0.340-	0.340	0.285-	0.430	0.060	0.160-	0.012-
6940.64	0.367-	0.338	0.302-	0.428	0.056	0.150-	0.019-
6956.84	0.369-	0.345	0.315-	0.430	0.055	0.154-	0.017-
6973.04	0.403-	0.332	0.346-	0.421	0.051	0.158-	0.022-
6989.24	0.449-	0.336	0.389-	0.410	0.058	0.148-	0.019-
7005.44	0.470-	0.345	0.411-	0.410	0.058	0.144-	0.022-
7021.64	0.310-	0.425	0.249-	0.490	0.069	0.193-	0.000
7037.84	0.239-	0.444	0.193-	0.506	0.069	0.208-	0.013
7054.04	0.243-	0.431	0.191-	0.500	0.071	0.204-	0.006
7070.24	0.239-	0.427	0.191-	0.500	0.073	0.200-	0.013
7626.44	0.174-	0.248	0.167-	0.301	0.031	0.181-	0.025
8166.44	0.118-	0.150	0.132-	0.165	0.009	0.123-	0.012
0.00	0.002-	0.004-	0.001-	0.003-	0.003-	0.007-	0.003-

CALC	06/16/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/16/2				D2-80081
APR	SHIMONS 6/16/2				
APR	Chalson 6/20/2				
CONTRACT NO.					FIG. 209

TIME SEC.	1-4 D-08 INCHES	2-4 L-01 POUNDS
.33	0.012-	15.08
.87	0.003-	22.62
33.27	0.003-	22.62
65.67	0.003-	30.17
96.07	0.003-	30.17
150.47	0.003-	30.17
162.87	0.009-	30.17
195.27	0.009-	45.25
227.67	0.007-	30.17
260.07	0.000-	37.71
292.47	0.003-	15.08
324.87	0.012-	30.17
357.27	0.012-	37.71
389.67	0.014-	15.08-
422.07	0.005-	30.17
454.47	0.014-	37.71
486.87	0.009-	30.17
519.27	0.010-	37.71
521.97	0.010-	37.71
1317.26	0.010-	37.71
1857.26	0.014-	15.08
2397.26	0.023-	30.17
3281.60	0.018-	15.08
3314.00	0.018-	15.08
3346.40	0.027-	15.08
3378.80	0.027-	15.08
3411.20	0.027-	0.000-
3443.60	0.023-	37.71
3476.00	0.030-	30.17
3508.40	0.025-	0.000-
3540.80	0.025-	30.17
3562.94	0.030-	30.17
4102.94	0.029-	0.000-
4642.94	0.039-	0.000-
4937.78	0.049-	22.62
4970.18	0.047-	0.000-
5002.58	0.045-	15.08-
5034.98	0.045-	7.541
5067.38	0.050-	0.000-
5077.78	0.049-	7.542-

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EXPERT 6/19/72				
APR	SHIMONO 6/20/72				
APR	Chiles 6/20/72				DR-80081
					PAGE 1
CONTRACT NO.					FIG. 210

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PROFESSIONAL BUSINESS FORMS

TIME SEC.	1-4 D-08 INCHES	2-4 L-01 POUNDS
5132.18	0.050-	0.000-
5164.58	0.054-	22.62
5196.98	0.054-	0.000-
5229.38	0.054-	30.17
5261.78	0.061-	30.17
5294.18	0.061-	22.62
5326.58	0.065-	37.71
5358.98	0.072-	22.62
5380.58	0.067-	0.000-
5650.58	0.081-	0.000
5682.98	0.087-	15.08-
5715.38	0.088-	15.08-
5747.78	0.092-	0.000-
5780.18	0.098-	0.000-
5812.58	0.096-	30.17-
5844.98	0.096-	15.08-
5877.38	0.096-	7.542-
5909.78	0.101-	7.542-
5942.18	0.099-	30.17-
5974.58	0.107-	22.62-
6006.98	0.107-	37.71-
6039.38	0.108-	15.08-
6071.78	0.108-	30.17-
6104.18	0.114-	30.17-
6136.58	0.119-	37.71-
6168.98	0.116-	30.17-
6201.38	0.125-	15.08-
6233.78	0.119-	30.17-
6266.18	0.123-	45.25-
6298.58	0.121-	15.08-
6330.98	0.130-	37.71-
6363.38	0.134-	30.17-
6395.78	0.130-	37.71-
6428.18	0.136-	37.71-
6460.58	0.137-	45.25-
6470.84	0.137-	37.71-
6487.04	0.148-	196.1
6503.24	0.139-	150.8
6519.44	0.132-	460.0
6535.64	0.136-	588.2

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/19/72				
APR	SHIMONO 6/20/72				D2-80081
APR	Choban 6/20/72				PAGE
CONTRACT NO.					FIG. 211

TIME SEC.	1-4 D-08 INCHES	2-4 L-01 POUNDS
6551.84	0.125-	806.9
6568.04	0.127-	987.9
6584.24	0.136-	1011. ✓
6600.44	0.125-	1222. ✓
6616.64	0.125-	1207. ✓
6632.84	0.130-	852.2 ✓
6649.04	0.143-	241.3
6665.24	0.148-	128.2
6681.44	0.148-	120.7
6697.64	0.145-	558.1
6713.84	0.127-	1192.
6730.04	0.125-	1425. ✓
6746.24	0.118-	1629. ✓
6762.44	0.112-	1833. ✓
6778.64	0.107-	2164. ✓
6794.84	0.103-	2413. ✓
6811.04	0.108-	2466. ✓
6827.24	0.096-	2677. ✓
6843.44	0.099-	2692. ✓
6859.64	0.098-	2919. ✓
6875.84	0.098-	2919. ✓
6892.04	0.099-	3054. ✓
6908.24	0.098-	3318. ✓
6924.44	0.087-	3507. ✓
6940.64	0.081-	3688. ✓
6956.84	0.087-	3650. ✓
6973.04	0.079-	3929. ✓
6989.24	0.076-	3929. <i>net</i>
7005.44	0.081-	3846. ✓
7021.64	0.150-	829.6
7037.84	0.167-	75.41
7054.04	0.161-	181.0
7070.24	0.163-	181.0
7626.44	0.157-	82.96-
8166.44	0.107-	75.41-
00	0.005-	15.00

CALC	06/16/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0301 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/18/72				D2-80081
APR	SHIMONO 6/20/72				
APR	Chobee 6/21/72				
CONTRACT NO.					PAGE: FIG. 212

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TEMPERATURES,
DEFLECTIONS
& LOADS

*THERMOCOUPLE DATA (SEE FIG. 5 FOR LOCATIONS)

FIGURE NO.

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T-44, T-45 226-227
T-46 230-231

* T-12 circuit opened (No data available)

APPROVED BY

K. D. ...
7/24/62 7-25-62 7/25/62

RADIANT HEAT LAB.

*DEFLECTION DATA AND LOAD (SEE FIG. 16 FOR LOCATIONS)

FIGURE NO.

D-01, D-02, D-03, D-04, D-05, D-06, D-07 228-229
D-08, T-46, L-01 230-231

TOLERANCES:

THERMOCOUPLES = $\pm 45^{\circ}\text{F}$

EDI'S

D-02, D-06, D-08 = ± 0.005 inches

D-01, D-03, D-04, D-05, D-07 = ± 0.020 inches

LOAD

L-01 = ± 50 pounds

APPROVED BY

W. ...
7/23/62

INSTRUMENTATION LAB.

*TEMPERATURES IN $^{\circ}\text{F}$

*DEFLECTIONS IN INCHES

*LOADS IN THOUSANDS OF POUNDS

Aborted Test - See Re-run 1.1,
Fig. 232

CALC	STRICKLAND	7/2/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK			E. S.	7/23/2		
APPD						D2-80081
APPD						PAGE FIG. 213

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
	-----DEGREES FAHRENHEIT-----						
.33	94.49	84.11	84.34	86.89	97.13	99.77	92.21
.87	94.49	92.02	84.34	84.26	97.13	97.13	92.21
33.27	113.0	94.65	86.97	89.52	139.4	139.4	121.1
65.67	165.8	126.3	97.47	97.41	213.0	215.7	170.9
98.07	213.0	160.5	113.2	105.3	239.3	244.6	186.5
130.47	249.8	202.4	131.6	113.2	241.9	239.3	186.5
162.87	292.3	226.0	155.2	131.6	292.3	284.1	215.3
195.27	330.5	260.0	178.7	147.4	330.5	327.7	244.0
227.67	368.6	308.2	212.6	181.4	417.1	417.1	315.8
258.99	393.2	343.5	249.2	220.6	488.1	490.7	407.6
447.99	346.8	327.2	291.4	267.6	207.8	186.8	160.4
480.39	385.0	343.5	296.8	280.7	308.7	286.9	244.0
512.79	417.1	362.5	313.0	291.5	341.4	344.1	329.3
545.19	443.4	381.6	323.9	299.7	333.2	349.5	348.3
577.59	480.2	411.0	345.5	321.4	409.2	427.6	394.3
609.99	532.8	460.9	364.5	332.2	422.3	448.6	405.0
642.39	572.3	500.2	388.8	351.2	459.2	482.8	433.7
674.79	611.7	531.7	415.4	367.5	453.9	472.3	399.7
707.19	638.0	584.1	446.7	389.1	493.4	501.2	431.1
739.59	695.9	613.0	475.5	418.3	548.6	561.7	486.0
771.99	732.7	647.1	506.8	441.9	559.1	574.9	506.9
804.39	776.6	699.5	543.4	473.3	593.3	606.5	538.3
836.79	807.3	736.2	577.4	504.6	603.8	619.6	556.6
869.19	838.0	754.5	608.8	536.0	611.7	627.5	567.0
901.59	863.6	782.5	634.9	557.0	601.2	617.0	567.0
933.99	896.8	800.3	661.0	585.8	617.0	630.1	580.1
966.39	937.7	838.6	689.8	609.3	640.6	661.7	614.1
998.79	973.5	874.2	721.1	635.5	667.0	672.2	621.9
1031.19	1015.	902.3	749.9	666.9	703.8	709.0	655.9
1044.69	1025.	920.1	765.1	677.3	719.6	719.6	669.0
1077.09	1025.	930.3	795.6	714.0	727.4	719.6	663.8
1109.49	1025.	935.4	818.4	740.1	743.2	698.5	640.2
1141.89	1007.	915.0	826.1	765.8	719.6	680.1	611.5
1174.29	1012.	915.0	833.7	776.0	714.3	680.1	603.6
1206.69	1009.	915.0	836.2	783.6	711.7	672.2	606.3
1239.09	1007.	907.4	841.3	791.3	730.1	682.7	611.5
1271.49	1009.	909.9	846.4	793.8	738.0	693.3	608.9
1303.89	1011.	912.5	846.4	796.3	743.2	695.9	611.5
1336.29	1025.	920.1	851.4	796.3	740.6	698.5	611.5
1368.69	1015.	909.9	851.4	798.9	703.8	667.0	611.5

CALC	06/22/73	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01	EWA 5-652
CHECK	Stapp	4/28/73			DR-80081
APR					
APR					
THE BOEING COMPANY					PAGE
CONTRACT NO.					FIG. 214

U6 5553 7450

2-5000

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
	-----DEGREES FAHRENHEIT-----						
1401.09	1059.	932.8	859.1	804.0	774.1	738.0	661.1
1433.49	1103.	971.1	869.2	811.6	794.5	776.6	708.2
1465.80	1131.	1015.	894.6	826.9	871.2	845.7	767.8
1498.29	1170.	1056.	955.6	908.2	1224.	1160.	1045.
1530.69	1160.	1084.	1035.	1013.	1191.	1160.	1076.
1563.09	1035.	1017.	1019.	997.2	701.1	659.1	608.9
1595.49	917.2	907.4	942.9	920.9	456.5	395.9	372.7
1627.89	835.4	820.7	866.7	844.7	363.2	295.0	275.3
1660.29	774.1	754.5	800.7	783.6	376.8	308.7	275.3
1692.69	716.9	699.5	739.4	724.4	292.3	226.2	204.8
1725.09	664.3	631.3	679.3	666.9	249.8	192.0	176.1
1757.49	614.3	589.4	627.0	614.5	223.6	171.0	157.8
1789.89	574.9	552.7	582.6	572.7	207.8	160.5	147.4
000.00	*223.8	*176.2	*194.6	*186.7	*99.71	*91.86	*86.91

CALC	06/22/82	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	Stapp 6/27/82				DR-80081
APR					
APR					
CONTRACT NO.					PAGE FIG. 215

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
.33	92.24	86.75	102.4	123.6		139.4	97.37
.87	92.24	86.75	102.4	123.6		139.4	97.37
33.27	110.6	97.29	102.4	128.9		139.4	102.6
65.67	150.0	102.6	107.7	131.5		147.4	107.9
98.07	160.4	110.5	113.0	134.2		150.0	115.8
130.47	157.8	113.1	118.3	134.2		150.0	123.7
162.87	181.3	121.0	123.6	139.5		152.6	128.9
195.27	202.2	128.9	131.5	142.1		155.3	136.8
227.67	267.4	144.7	144.7	147.4		160.5	152.6
258.99	364.4	176.2	173.6	160.5		181.5	181.4
447.99	147.4	165.7	165.8	160.5		160.5	176.2
480.39	230.9	176.2	173.6	160.5		165.8	181.4
512.79	337.3	202.4	199.9	173.6		181.5	202.3
545.19	367.1	233.8	220.9	191.9		205.1	233.7
577.59	383.3	260.0	241.9	215.5		228.8	257.2
609.99	386.0	273.1	260.3	236.5		247.1	275.5
642.39	417.9	300.0	281.3	260.0		273.4	297.1
674.79	369.8	302.7	294.9	286.5		294.9	305.2
707.19	396.9	316.3	311.3	324.5		330.4	318.8
739.59	451.6	338.1	338.5	376.2	30.21	379.4	343.2
771.99	478.0	368.0	376.7	426.9	30.21	430.1	373.1
804.39	506.7	400.5	411.7	479.3	38.96	480.0	402.8
836.79	522.4	432.0	453.7	529.2	56.47	524.7	439.5
869.19	538.1	466.1	490.5	571.2	65.22	564.1	473.5
901.59	551.1	494.9	524.7	610.5	65.22	606.2	507.5
933.99	572.0	523.8	561.5	642.0	65.22	637.7	539.0
966.39	606.0	563.1	598.3	673.5	73.97	671.9	573.0
998.79	621.6	597.2	629.8	705.0	82.62	703.4	604.4
1031.19	655.6	628.7	666.6	746.9	91.04	745.5	638.5
1044.69	679.1	647.0	682.4	764.9	99.46	763.5	651.6
1077.09	658.2	678.5	711.3	782.7	91.04	783.9	680.4
1109.49	629.5	689.0	724.5	777.6	91.04	776.3	696.1
1141.89	603.4	686.4	719.2	762.3	107.9	755.8	701.3
1174.29	579.8	678.5	711.3	744.3	107.9	735.0	698.7
1206.69	585.1	668.0	703.4	733.8	107.9	721.8	690.8
1239.09	590.3	668.0	698.2	731.2	107.9	716.6	688.2
1271.49	572.0	652.3	695.5	723.3	116.3	716.6	685.6
1303.89	577.2	652.3	690.3	720.7	116.3	721.8	683.0
1336.29	574.6	644.4	687.7	720.7	116.3	721.8	683.0
1368.69	595.5	652.3	692.9	720.7	116.3	716.6	683.0

AIRCRAFT
 DATA
 AVAILABLE

CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	STACKLAND 7/20/62				5-652
APR					DZ-80081
APR					PAGE 1.0
CONTRACT NO.					FIG. 216

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
1401.09	637.3	657.5	695.5	731.2	116.3	724.5	688.2
1433.49	705.2	683.8	719.2	772.5	124.7	766.1	706.6
1465.89	749.6	715.2	750.7	823.5	116.3	814.6	735.4
1498.29	978.1	777.4	806.9	884.7	133.2	870.8	791.8
1530.69	1001.	843.6	863.1	920.4	116.3	904.0	845.2
1563.09	613.8	833.4	858.0	897.4	116.3	870.8	835.0
1595.49	399.6	764.6	809.5	826.0	133.2	783.9	786.7
1627.89	299.4	696.9	753.3	757.2	124.7	706.1	722.3
1660.29	283.2	639.2	692.9	697.1	133.2	645.6	664.7
1692.69	225.7	586.7	640.3	644.6	116.3	593.0	612.3
1725.09	194.4	536.9	590.4	594.8	124.7	545.7	562.5
1757.49	176.1	489.7	543.1	552.8	133.2	503.7	520.6
1789.89	165.7	455.6	506.3	513.4	124.7	469.5	478.7
000.00	*86.93	*134.1		*163.2			*131.5

CALC	0612212	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	STRICKLAND 7/20/62				5-652
APR					D2-8000
APR					PAGE 2.1
					FIG. 217
CONTRACT NO.					

UG 5553 7400

2-5000

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
	-----DEGREES FAHRENHEIT-----						
.33	92.12	97.37	83.87	92.03	86.89	115.9	105.1
.87	92.12	97.37	83.87	92.03	86.89	115.9	105.1
33.27	113.2	134.2	86.52	105.2	92.15	181.3	139.4
65.67	152.6	212.8	91.81	139.5	97.41	291.3	220.8
96.07	160.5	238.9	105.0	176.2	105.3	318.3	244.4
130.47	163.1	236.3	118.3	212.8	113.2	315.6	241.8
162.87	186.6	275.5	134.1	254.7	123.7	375.2	275.9
195.27	212.8	321.5	160.5	291.8	139.5	425.7	322.0
227.67	283.5	402.8	192.1	340.7	165.7	524.9	448.2
258.99	370.3	473.5	231.5	378.8	202.3	613.7	576.9
447.99	142.1	184.0	273.6	346.2	228.4	243.9	207.7
480.39	223.2	280.8	281.5	367.9	238.8	383.3	368.3
512.79	310.6	329.6	292.4	392.4	254.5	438.7	540.1
545.19	326.9	332.4	303.3	416.2	257.1	441.3	563.8
577.59	354.0	402.8	319.7	452.9	272.8	538.0	582.2
609.99	362.1	421.1	338.8	494.9	283.4	545.8	582.2
642.39	392.0	463.0	357.9	536.8	294.2	577.1	616.3
674.79	351.3	452.6	379.7	578.8	307.8	556.2	540.1
707.19	383.8	481.4	404.1	812.8	324.1	598.0	579.5
739.59	439.4	541.6	433.0	665.3	343.1	665.9	655.7
771.99	460.3	554.7	464.6	704.6	362.0	671.2	687.2
804.39	494.4	586.1	496.2	746.6	386.4	707.7	726.6
836.79	507.5	594.0	530.4	782.3	410.5	707.7	742.4
869.19	523.2	604.4	559.4	812.9	431.4	712.9	747.6
901.59	520.5	586.1	585.7	838.4	452.3	702.5	742.4
933.99	544.1	607.1	612.0	868.9	470.6	728.6	770.7
966.39	559.8	635.9	638.3	904.6	491.6	777.4	808.9
998.79	572.9	649.0	664.7	932.6	520.3	787.6	821.7
1031.19	599.1	680.4	696.2	978.5	541.3	833.3	849.8
1064.69	625.3	698.7	709.4	988.7	557.0	851.0	867.6
1077.09	609.6	696.1	743.6	996.3	585.8	848.5	847.2
1109.49	586.0	685.6	771.9	996.3	617.2	835.8	816.6
1141.89	549.3	662.1	787.3	978.5	640.7	848.5	819.2
1174.29	544.1	659.4	794.9	970.8	661.6	858.6	819.2
1206.69	546.7	651.6	794.9	968.3	677.3	856.1	808.9
1239.09	552.0	664.7	802.6	965.7	695.7	866.3	814.0
1271.49	554.6	669.9	805.2	958.1	703.5	868.8	821.7
1303.89	565.0	683.0	807.7	960.7	714.0	876.4	837.0
1336.29	552.0	677.8	810.3	963.2	716.6	876.4	831.9
1368.69	549.3	641.1	812.8	963.2	724.4	866.3	819.2
CALC	06/22/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	Stapp	6/29/2			EWA NO. 05652		
APR					SPEC. 0302		
APR					COND. NO. 01		
					THE BOEING COMPANY		
CONTRACT NO.					PAGE 1		
					FIG. 218		

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
	-----DEGREES FAHRENHEIT-----						
1401.09	596.5	724.9	815.4	986.1	737.5	927.2	898.3
1433.49	643.6	751.1	825.6	1022.	748.0	962.7	949.3
1465.89	709.0	829.9	846.1	1050.	768.4	1029.	1011.
1498.29	946.8	1155.	917.7	1110.	842.1	1430.	1282.
1530.69	959.5	1142.	1023.	1138.	951.4	1456.	1267.
1563.09	541.5	633.3	1010.	1048.	951.4	767.3	742.4
1595.49	340.4	378.5	927.9	927.5	893.0	504.0	477.1
1627.89	249.4	286.2	848.7	830.7	837.0	433.5	384.6
1660.29	246.7	294.4	779.6	754.3	796.3	485.7	421.9
1692.69	186.6	212.8	712.0	688.9	755.7	377.9	335.6
1725.09	160.5	176.2	651.5	631.2	719.2	334.6	294.8
1757.49	147.4	160.5	598.9	578.8	685.2	312.9	273.3
1789.89	139.5	150.0	551.5	536.8	656.4	294.0	257.6
000.00	*86.95	*86.95	*165.8	*176.3	*313.8	*136.9	*118.3

CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA
CHECK	St. pp 6/29/2				5-652
APR					D2-800
APR					PA
CONTRACT NO.					FIG. 21 ^a

5601

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 27
PIONEER BUSINESS FORMS

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
.33	86.68	73.36	97.34	97.01	97.12	91.99	92.06
.87	84.05	78.83	97.34	97.01	97.12	89.35	94.69
33.27	86.68	81.51	123.7	110.3	105.1	91.97	92.06
65.67	94.60	89.41	160.5	139.4	110.3	94.62	97.32
98.07	105.2	94.68	170.9	152.6	113.0	102.5	102.6
130.47	110.4	105.2	176.2	152.6	118.3	110.4	113.1
162.87	123.6	118.4	202.3	171.1	123.6	118.4	123.7
195.27	134.2	136.8	231.1	197.4	128.8	134.2	136.8
227.67	160.5	170.9	335.2	289.9	144.7	150.0	160.5
258.99	202.4	212.8	437.0	404.5	181.5	176.2	181.4
447.99	186.7	249.5	186.6	171.1	181.5	244.3	244.2
480.39	202.4	257.3	294.5	265.9	192.0	254.8	254.7
512.79	241.8	275.7	403.0	393.7	231.5	260.1	259.9
545.19	286.6	286.4	416.1	428.2	270.9	267.9	262.6
577.59	319.2	308.1	442.3	438.8	308.7	273.2	273.0
609.99	346.4	321.7	431.8	423.0	327.8	281.1	280.9
642.39	379.1	340.7	458.0	454.6	355.0	291.7	294.5
674.79	389.9	357.0	413.4	399.2	357.8	302.8	302.6
707.19	400.8	376.0	426.5	412.4	374.1	321.9	321.6
739.59	427.0	395.0	476.3	470.4	395.9	340.9	346.1
771.99	455.9	418.8	510.4	499.4	422.4	362.6	367.8
804.39	490.0	442.4	544.4	533.7	456.6	384.4	392.3
836.79	526.8	471.2	557.5	552.1	490.8	408.6	416.1
869.19	560.9	494.8	568.0	562.7	527.6	429.6	439.7
901.59	592.4	515.8	575.9	578.5	556.6	455.8	460.7
933.99	623.9	539.4	586.4	594.3	593.4	479.4	484.3
966.39	663.3	560.3	615.2	623.3	627.6	500.4	507.8
998.79	692.2	586.5	644.0	644.4	659.2	526.6	534.1
1031.19	726.3	612.8	662.3	668.2	696.0	550.2	557.6
1044.69	742.1	628.5	678.1	686.6	709.1	563.4	573.4
1077.09	767.8	665.2	730.5	699.8	743.3	589.6	604.8
1109.49	772.9	701.9	789.6	731.4	756.3	613.2	628.4
1141.89	772.9	736.0	794.7	726.2	756.3	631.6	646.7
1174.29	770.3	764.4	784.5	715.6	751.2	644.7	659.8
1206.69	770.3	777.1	781.9	715.6	748.6	657.8	673.0
1239.09	767.8	794.9	781.9	710.3	746.0	665.7	683.4
1271.49	767.8	805.1	781.9	710.3	743.3	676.2	693.9
1303.89	767.8	810.2	781.9	713.0	746.0	681.4	704.4
1336.29	770.3	810.2	771.8	707.7	746.0	689.3	709.6
1368.69	767.8	817.9	792.1	726.2	748.6	697.2	717.5
CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL			EWA
CHECK	Stop	4/29/2		EWA NO. 05652			5-652
APR				COND. NO. 01			
APR				SPEC. 0302			
				RUN 01			DZ-80081
				THE BOEING COMPANY			PAGE
CONTRACT NO.							FIG. 220

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
	-----DEGREES FAHRENHEIT-----						
1401.09	778.0	820.4	835.4	765.3	753.8	702.4	728.0
1433.49	808.6	830.6	858.3	801.1	779.3	715.6	741.1
1465.89	844.3	843.3	896.5	837.0	815.1	733.9	761.7
1498.29	903.0	929.9	1316.	1170.	866.2	767.5	820.3
1530.69	954.0	1058.	1349.	1224.	914.8	818.5	884.0
1563.09	931.0	1040.	717.4	686.6	902.0	836.4	871.2
1595.49	854.5	945.2	455.4	467.8	835.6	836.4	861.0
1627.89	788.2	853.5	375.9	366.4	769.1	826.2	845.8
1660.29	731.6	784.7	400.3	355.5	706.5	813.4	825.4
1692.69	681.7	720.2	291.7	287.2	648.6	793.0	807.6
1725.09	637.1	657.3	241.6	255.3	596.0	775.2	782.1
1757.49	595.1	599.6	218.0	229.0	548.7	754.8	759.2
1789.89	558.3	552.5	202.3	213.2	509.2	731.3	738.5
000.00	*218.6	*160.5	*89.40	*86.35	*155.3	*446.1	*439.6

CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	<i>Alapp</i> 5/29/2				D2-80081
APR					PAGE
APR					FIG. 221
CONTRACT NO.					

U6 5553 7450

2-5000

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
.33	105.0	107.6	105.1	105.3	78.67	84.11	79.03
.87	105.0	110.2	105.1	102.7	78.67	81.48	79.03
33.27	118.2	123.5	113.0	113.2	78.67	86.75	81.69
65.67	152.6	155.3	142.1	150.0	84.00	92.02	81.69
98.07	192.1	184.3	165.8	186.6	84.00	97.29	81.69
130.47	213.2	213.3	189.4	204.9	91.92	97.29	86.95
162.87	250.1	244.9	218.3	233.6	91.92	105.2	86.95
195.27	284.5	284.6	249.8	270.2	94.56	107.8	86.95
227.67	322.7	320.1	281.3	307.7	99.84	121.0	92.20
258.79	358.2	353.0	314.0	340.3	118.3	136.8	108.0
447.99	306.3	353.0	349.4	307.7	136.8	147.4	129.0
480.39	320.0	366.6	360.3	318.6	142.1	155.2	131.6
512.79	317.2	358.4	354.9	318.6	157.9	171.0	142.1
545.19	309.0	353.0	352.2	313.2	178.9	199.8	163.1
577.59	328.2	374.8	368.5	332.1	205.1	220.7	178.7
609.99	366.4	404.8	393.0	364.7	220.8	239.0	194.4
642.39	401.9	431.2	416.9	399.9	239.2	265.2	212.7
674.79	438.8	462.8	443.2	426.1	257.6	283.7	233.5
707.19	470.4	497.1	474.8	462.7	273.3	297.3	254.9
739.59	512.6	542.0	511.6	499.3	303.0	332.6	299.5
771.99	539.0	576.3	543.1	530.7	338.4	367.9	334.7
804.39	573.2	610.6	579.9	559.5	373.8	405.8	372.7
836.79	597.0	642.3	611.5	583.0	411.5	450.4	410.2
869.19	618.1	671.3	643.0	609.2	456.1	487.1	446.8
901.59	639.2	700.3	669.3	630.1	487.7	521.2	478.2
933.99	655.0	724.1	700.9	648.4	521.8	555.3	507.0
966.39	697.2	771.0	742.9	690.2	553.3	586.7	535.7
998.79	726.2	799.2	771.2	713.8	584.9	620.8	564.5
1031.19	770.4	842.8	812.1	758.0	619.0	654.9	601.1
1044.69	785.8	855.6	824.9	770.7	632.2	670.6	622.0
1077.09	796.0	868.4	845.3	783.4	668.9	699.5	637.7
1109.49	757.6	842.8	842.7	758.0	679.4	707.4	642.9
1141.89	734.1	824.8	835.1	737.3	684.7	710.0	648.1
1174.29	726.2	819.7	830.0	734.7	684.7	707.4	648.1
1206.69	728.8	817.1	827.4	742.6	682.1	707.4	650.7
1239.09	711.1	817.1	830.0	747.8	682.1	704.7	645.5
1271.49	742.0	817.1	830.0	752.9	679.4	702.1	645.5
1303.89	744.6	819.7	830.0	760.6	679.4	704.7	645.5
1336.29	747.3	822.3	832.5	765.6	674.2	704.7	642.9
1368.69	755.0	822.3	832.5	765.6	679.4	702.1	645.5
CALC	06/22/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01		
CHECK	Stapp	6/29/72					
APR							
APR							
					THE BOEING COMPANY		
					PAGE 1		
CONTRACT NO.					FIG. 222		

TIME SEC.	3-9	4-9	7-9	8-9	3-10	4-10	7-10
	T-30	T-31	T-32	T-33	T-34	T-35	T-36
	-----DEGREES FAHRENHEIT-----						
1401.09	770.4	837.7	845.3	780.9	684.7	707.4	650.7
1433.49	811.4	868.4	870.8	816.5	697.8	731.0	676.9
1465.89	847.3	901.8	901.5	849.5	734.6	769.7	713.5
1498.29	898.5	942.8	932.2	897.8	778.4	820.7	750.1
1530.69	931.8	960.8	952.6	935.9	821.8	853.8	775.5
1563.09	916.4	953.1	952.6	923.2	821.8	843.6	775.5
1595.49	867.7	919.7	934.7	869.8	796.3	810.5	765.3
1627.89	824.2	894.1	911.7	834.3	765.7	774.8	742.2
1660.29	796.0	868.4	888.7	806.8	732.0	741.4	713.5
1692.69	773.0	845.4	865.7	783.4	700.5	707.4	687.3
1725.09	749.9	822.3	840.2	760.6	671.6	678.5	658.6
1757.49	731.4	796.6	814.6	737.3	642.7	644.4	635.0
1789.89	705.1	776.1	791.7	713.8	616.4	615.6	608.9
000.00	*438.1	*501.9	*508.8	*437.3	*282.4	*287.5	*287.8

CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	<i>Stop</i>	6/29/2			02-80081
APR					
APR					
CONTRACT NO.					PAGE
					FIG. 223

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
33	81.55	81.35	83.99	97.15	92.03	86.47	89.26
.87	84.19	78.66	83.99	94.51	89.40	89.11	91.90
33 27	78.88	81.35	83.99	99.79	92.03	91.76	94.54
65.67	84.19	81.35	86.63	105.1	94.67	97.05	97.18
98.07	86.82	81.35	91.91	105.1	102.6	97.05	97.18
130.47	86.82	83.99	94.55	102.4	105.2	94.41	99.82
162.87	86.82	86.63	97.19	131.5	113.1	105.0	107.7
195.27	86.82	86.63	102.5	163.1	134.2	118.2	118.3
227.67	94.72	89.27	110.4	186.8	150.0	168.4	131.5
258.99	102.6	97.19	134.2	226.2	176.2	147.4	147.4
447.99	118.4	118.3	142.1	150.0	168.3	168.4	168.4
480.39	123.7	123.6	150.0	176.3	176.2	173.7	173.6
512.79	131.6	134.2	171.0	228.8	197.1	186.8	186.7
545.19	142.1	150.0	197.2	284.1	228.6	207.9	207.7
577.59	152.6	163.1	220.8	322.2	254.7	231.6	239.2
609.99	163.1	176.2	231.3	346.8	283.7	255.2	260.2
642.39	176.2	192.0	257.6	382.2	313.6	281.6	292.2
674.79	197.1	205.1	273.3	395.8	338.0	308.9	314.0
707.19	228.5	231.3	303.0	435.4	367.9	347.1	346.6
739.59	265.1	262.8	338.4	495.9	408.4	377.1	384.8
771.99	308.0	297.6	376.5	522.2	442.4	417.5	419.5
804.39	348.7	335.7	419.4	545.8	468.7	446.4	453.6
836.79	389.4	373.8	458.8	564.2	497.5	475.4	479.9
869.19	429.1	416.8	495.6	569.5	521.1	499.1	506.2
901.59	460.5	450.9	527.1	580.0	531.6	525.4	522.0
933.99	492.0	479.8	561.3	656.3	573.5	559.7	566.6
966.39	520.8	511.4	592.8	690.4	610.2	599.2	606.0
998.79	547.0	537.6	621.7	703.6	636.4	628.2	637.6
1031.19	586.3	574.4	663.7	722.0	662.7	662.4	663.9
1044.69	602.0	592.8	679.5	748.3	678.4	680.9	684.9
1077.09	620.3	619.1	700.5	735.1	699.4	704.6	708.5
1109.49	625.5	627.0	700.5	703.6	694.1	715.1	716.4
1141.89	628.2	632.2	700.5	693.1	688.9	720.4	724.3
1174.29	622.9	634.8	692.6	685.2	688.9	730.9	726.9
1206.69	620.3	632.2	695.2	679.9	686.3	733.5	737.4
1239.09	625.5	632.2	695.2	643.1	681.0	728.3	729.6
1271.49	620.3	632.2	692.6	611.6	660.0	717.7	713.8
1303.89	617.7	627.0	692.6	635.2	662.7	709.8	716.4
1336.29	620.3	627.0	690.0	643.1	660.0	717.7	711.2
1368.69	620.3	629.6	690.0	679.9	678.4	720.4	721.7

CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	8/5/92	6/19/2			02-80081
APR					
APR					
CONTRACT NO.					FIG. 224

FRONTIER BUSINESS FORMS

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TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
	-----DEGREES FAHRENHEIT-----						
1401.09	622.9	632.2	700.5	708.8	691.5	730.9	737.4
1433.49	651.7	655.8	732.0	773.9	725.6	757.0	760.8
1465.89	691.0	684.7	770.8	817.3	761.9	787.8	791.4
1498.29	730.3	721.5	811.7	871.0	818.0	818.5	822.1
1530.69	746.0	747.8	837.2	883.8	861.3	844.1	845.0
1563.09	740.8	750.4	827.0	799.4	833.3	854.3	852.7
1595.49	727.7	742.5	796.3	666.8	761.9	823.6	819.5
1627.89	709.4	724.2	763.2	590.5	704.6	790.3	783.8
1660.29	688.4	703.1	732.0	545.8	657.4	751.9	748.0
1692.69	670.1	679.5	700.5	498.5	612.8	717.7	711.2
1725.09	651.7	658.5	669.0	464.3	570.9	680.9	679.6
1757.49	628.2	634.8	640.1	432.8	536.8	644.0	642.8
1789.89	607.2	611.2	611.2	406.5	502.7	612.4	611.3
000.00	*312.0	*321.2	*288.2	*152.6	*101.4	*266.7	*266.5

CALC	06/22/71	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	Stapp 6/23/71				
APR					
APR					
CONTRACT NO.					DR-80081 PAL FIG. 225

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2-5000

TIME SLC.	7-12 T-44 DEG F	8-12 T-45 DEG F
233	91.86	94.73
.87	94.50	97.36
34.27	94.50	00.00
65.67	99.79	107.9
98.07	105.1	107.9
130.47	105.1	107.9
162.87	113.0	128.9
195.27	136.8	160.5
227.67	150.0	176.2
258.99	178.9	215.4
447.99	171.0	168.3
480.39	176.3	181.4
512.79	194.6	223.2
545.19	228.8	267.7
577.59	262.9	307.9
609.99	292.3	337.8
642.39	325.0	375.8
674.79	349.5	405.4
707.19	382.2	431.6
739.59	427.5	489.2
771.99	461.7	520.7
804.39	490.6	544.2
836.79	514.3	565.2
869.19	532.7	573.0
901.59	548.5	583.5
933.99	590.5	646.3
966.39	630.0	688.2
998.79	658.9	714.4
1031.19	685.2	730.1
1044.69	698.4	756.2
1077.09	722.0	761.2
1109.49	716.8	735.4
1141.89	711.5	724.9
1174.29	708.9	719.7
1206.69	706.2	717.1
1239.09	695.7	693.5
1271.49	669.4	659.4
1303.89	666.8	677.8
1336.29	672.1	680.4
1368.69	690.5	706.6

CALC	06/22/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	Thapp 6/22/2				
APR					DR-80081
APR					PAGE
CONTRACT NO.					FIG. 226

116 55-53 2450

2-5000

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
.33	0.019-	0.005	0.003-	0.009	0.003-	0.003	0.000
.87	0.019-	0.003	0.001	0.005	0.001	0.000	0.006
33.27	0.019-	0.003	0.001-	0.005	0.003-	0.003	0.006
65.67	0.019-	0.013	0.000	0.009	0.003-	0.003	0.005
98.07	0.027-	0.003	0.003-	0.010	0.003	0.003	0.006
130.47	0.027-	0.009	0.001-	0.007	0.000	0.001-	0.003
162.87	0.021-	0.011	0.003-	0.014	0.003	0.003	0.003
195.27	0.023-	0.011	0.003-	0.016	0.000	0.005	0.005
227.67	0.025-	0.015	0.007-	0.020	0.001	0.005	0.010
258.99	0.029-	0.020	0.003-	0.029	0.005	0.003	0.003
447.99	0.027-	0.016	0.007-	0.023	0.003	0.005	0.006
480.39	0.025-	0.018	0.013-	0.027	0.000	0.005	0.008
512.79	0.027-	0.022	0.011-	0.032	0.005	0.003	0.003
545.19	0.025-	0.028	0.011-	0.030	0.003	0.005	0.006
577.59	0.025-	0.033	0.013-	0.038	0.011	0.005	0.013
609.99	0.035-	0.033	0.011-	0.038	0.012	0.005	0.008
642.39	0.023-	0.041	0.013-	0.045	0.012	0.001	0.010
674.79	0.031-	0.043	0.003-	0.050	0.014	0.003-	0.006
707.19	0.035-	0.043	0.007-	0.050	0.018	0.003	0.010
739.59	0.027-	0.046	0.013-	0.054	0.018	0.003-	0.006
771.99	0.033-	0.063	0.009-	0.065	0.022	0.005-	0.003
804.39	0.035-	0.059	0.018-	0.069	0.022	0.011-	0.006
836.79	0.035-	0.071	0.013-	0.078	0.027	0.013-	0.012
869.19	0.029-	0.078	0.018-	0.083	0.025	0.025-	0.012
901.59	0.027-	0.088	0.017-	0.088	0.025	0.025-	0.006
933.99	0.043-	0.093	0.018-	0.096	0.029	0.021-	0.013
966.39	0.035-	0.099	0.009-	0.099	0.032	0.019-	0.012
998.79	0.043-	0.101	0.020-	0.099	0.034	0.034-	0.013
1031.19	0.043-	0.112	0.018-	0.110	0.032	0.031-	0.013
1044.69	0.033-	0.116	0.015-	0.114	0.034	0.027-	0.015
1077.09	0.035-	0.118	0.020-	0.119	0.040	0.034-	0.017
1109.49	0.037-	0.116	0.018-	0.119	0.040	0.034-	0.015
1141.89	0.031-	0.119	0.011-	0.121	0.032	0.032-	0.019
1174.29	0.041-	0.116	0.009-	0.127	0.029	0.036-	0.020
1206.69	0.041-	0.118	0.015-	0.119	0.032	0.034-	0.020
1239.09	0.039-	0.119	0.015-	0.127	0.034	0.034-	0.019
1271.49	0.047-	0.114	0.020-	0.125	0.029	0.034-	0.022
1303.89	0.039-	0.119	0.018-	0.128	0.034	0.032-	0.022
1336.29	0.041-	0.116	0.011-	0.123	0.032	0.038-	0.017
1368.69	0.041-	0.121	0.018-	0.128	0.031	0.029-	0.017

CALC	06/22/8	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01	EWA 5-652
CHECK	STOPP 1-12-82				DR-80081
APR	CRAM 7-6-82				
APR					
THE BOEING COMPANY					PAC
CONTRACT NO.					FIG.227

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
1401.09	708.9	735.4
1433.49	748.3	786.7
1465.89	786.7	832.5
1498.29	842.9	901.2
1530.69	896.6	939.4
1563.09	878.7	865.6
1595.49	789.3	745.9
1627.89	722.0	667.3
1660.29	666.8	617.5
1692.69	616.8	565.2
1725.09	572.1	523.3
1757.49	532.7	489.2
1789.89	498.5	455.2
001.00	*189.5	*173.6

CALC	06/22/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	<i>Stopp</i> 6/27/72				
APR					
CONTRACT NO.					PAC F16.228

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PROTEC BUSINESS FORMS

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
1401.09	0.041-	0.119	0.018-	0.130	0.042	0.031-	0.020
1433.49	0.037-	0.127	0.018-	0.136	0.036	0.034-	0.019
1465.89	0.047-	0.127	0.011-	0.139	0.042	0.036-	0.013
1498.29	0.045-	0.136	0.026-	0.154	0.049	0.040-	0.024
1530.69	0.051-	0.153	0.015-	0.172	0.049	0.027-	0.022
1563.09	0.051-	0.138	0.015-	0.154	0.040	0.036-	0.022
1595.49	0.043-	0.129	0.018-	0.141	0.029	0.042-	0.015
1627.89	0.047-	0.121	0.022-	0.127	0.031	0.048-	0.019
1660.29	0.043-	0.108	0.024-	0.123	0.027	0.046-	0.022
1692.69	0.043-	0.103	0.022-	0.114	0.022	0.040-	0.020
1725.09	0.047-	0.089	0.018-	0.103	0.014	0.044-	0.019
1757.49	0.037-	0.086	0.020-	0.096	0.022	0.046-	0.020
1789.89	0.037-	0.076	0.022-	0.096	0.018	0.034-	0.020
000.00	*0.033-	*0.008-	*0.009-	*0.003	*0.003	*0.001	*0.001-

READ
WITH
0.019-
FOR
ZERO
NOT
SUBTRACTED

CALC	06/22/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	Slaps 6/22/72				DR-80081
APR	Calms 7-6-62				
APR					
CONTRACT NO.					PAC FIG. 229

245

U6 5553 7450

2-5000

TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS
.33	0.003-	70.34	0.000
.87	0.009-	70.34	15.17
33.27	0.003-	70.34	22.76
65.67	0.005-	70.34	15.17
98.07	0.001-	70.34	7.586-
130.47	0.000	73.08	7.586-
162.87	0.005-	73.08	15.17
195.27	0.001-	73.08	0.000
227.67	0.003	70.34	22.76
258.99	0.001-	73.08	7.585
447.99	0.001-	73.08	22.76
480.39	0.005-	73.08	7.585
512.79	0.003-	73.08	15.17
545.19	0.003-	73.08	7.585
577.59	0.003-	73.08	0.000
609.99	0.001	73.08	22.76
642.39	0.005-	73.08	7.585
674.79	0.003-	73.08	0.000
707.19	0.001	75.83	22.76
739.59	0.010-	75.83	7.585
771.99	0.009-	75.83	15.17
804.39	0.005-	75.83	22.76
836.79	0.009-	78.58	22.76
869.19	0.014-	78.58	22.76
901.59	0.014-	78.58	7.585
933.99	0.018-	78.58	15.17
966.39	0.012-	78.58	22.76
998.79	0.014-	78.58	15.17
1031.19	0.016-	81.27	0.000
1044.69	0.020-	81.27	15.17
1077.09	0.021-	81.27	7.585
1109.49	0.016-	83.92	7.585
1141.89	0.021-	83.92	15.17
1174.29	0.018-	83.92	0.000
1206.69	0.016-	83.92	15.17
1239.09	0.023-	86.56	0.000
1271.49	0.020-	86.56	7.585
1303.89	0.025-	86.56	7.585
1336.29	0.020-	86.56	7.585
1368.69	0.020-	89.20	7.586-

CALC	06/22/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	<i>Stapp</i> 6/27/72				
APR	<i>CRAM</i> 7-6-62				
APR					
CONTRACT NO.					PAC FIG. 230

17046

TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS
1401.09	0.018-	89.20	7.585
1433.49	0.021-	91.85	7.586-
1465.89	0.018-	91.85	15.17
1498.29	0.027-	91.85	7.585
1530.69	0.021-	94.49	7.585
1563.09	0.021-	91.85	7.586-
1595.49	0.029-	94.49	7.585
1627.89	0.021-	94.49	7.586-
1660.29	0.025-	97.13	22.76
1692.69	0.029-	97.13	0.000
1725.09	0.027-	97.13	7.585
1757.49	0.029-	97.13	7.585
1789.89	0.027-	97.13	15.17
000.00	*0.003	*97.13	*7.552

No
LOAD
APPLIED

CALC	06/22/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 01 THE BOEING COMPANY	EWA 5-652
CHECK	Stop 6/29/72				D2-80081
APR	CRW 7-6-72				
APR					
CONTRACT NO.					FIG. 231

17-000

247

17-000 BUSINESS FORMS

TEMPERATURES,
DEFLECTIONS
& LOADS

THERMOCOUPLE DATA (SEE FIG. 5 FOR LOCATIONS)

FIGURE NO.

T-01, T-02, T-03, T-04, T-05, T-06, T-07	233-238
T-08, T-09, T-10, T-11, T-12, T-13, T-14,	239-244
T-15, T-16, T-17, T-18, T-19, T-20, T-21	245-250
T-22, T-23, T-24, T-25, T-26, T-27, T-29	251-256
T-30, T-31, T-32, T-33, T-34, T-35, T-36	257-262
T-37, T-38, T-39, T-40, T-41, T-42, T-43	263-268
T-44, T-45	269-274
T-46	281-286

* T-03 Thermocouple malfunctioned

2944.41 seconds -- Interruption in plant power caused loss of power to the specimen and a decrease in temperature before specimen power could be returned.

APPROVED BY K. Dorsey M. Jensen RADIANT HEAT LAB.
7/25/62 7-25-62

DEFLECTION DATA AND LOADS (SEE FIG. 16 FOR LOCATIONS)

FIGURE NO.

D-01, D-02, D-03, D-04, D-05, D-06, D-07	275-280
D-08, T-46, L-01	281-286

TOLERANCES:

THERMOCOUPLES = $\pm 45^{\circ}\text{F}$

EDI'S

D-02, D-06, D-08 = ± 0.005 inches

D-01, D-03, D-04, D-05, D-07 = ± 0.020 inches

LOAD

L-01 = ± 100 pounds

APPROVED BY Maurice Cloutier INSTRUMENTATION LAB.
7/25/62

*TEMPERATURES IN $^{\circ}\text{F}$
*DEFLECTION IN INCHES
*LOADS IN THOUSANDS OF POUNDS

CALC	STRICKLAND	7/2/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC 0302 COND. NO. 01 RUN 1.1 THE BOEING COMPANY	EWA 5-65
CHECK						
APPD						D2-80081
APPD						PAGE FIG. 232

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
	-----DEGREES FAHRENHEIT-----						
.33	97.13	86.69	94.68	97.39	86.56	91.93	89.52
.87	97.13	97.24	97.32	94.76	86.56	89.29	89.52
33.27	110.3	91.97	94.68	97.39	120.9	128.9	113.2
65.67	144.7	113.1	102.6	100.0	181.5	205.1	173.5
98.07	176.3	150.0	107.9	107.9	215.7	233.9	194.4
130.47	189.4	171.0	107.9	115.8	197.3	220.8	186.6
162.87	181.5	163.3	113.1	121.1	152.6	171.0	147.4
195.27	194.7	173.6	131.6	126.3	171.0	194.6	163.1
227.67	207.8	191.9	139.5	129.0	207.8	241.8	220.6
260.07	226.2	194.6	144.7	142.1	239.3	294.8	272.8
292.47	244.6	220.8	163.1	152.6	273.5	332.9	321.3
324.87	289.6	247.0	178.8	173.5	357.7	408.8	378.3
357.27	338.7	294.7	225.9	212.7	406.6	445.6	410.4
389.67	363.2	319.2	257.3	249.3	425.0	479.7	439.2
422.07	485.5	400.8	273.0	291.6	469.7	532.3	481.1
454.47	488.1	445.4	294.5	329.6	480.2	534.9	494.2
486.87	503.9	469.0	392.3	370.2	530.2	550.6	509.9
519.27	524.9	492.6	400.3	415.8	540.7	569.0	525.6
537.63	538.1	513.6	421.4	436.7	564.4	579.5	538.6
905.91	567.0	539.9	333.0	473.4	379.5	379.2	353.9
938.31	601.2	547.7	302.7	478.6	469.7	471.8	447.1
970.71	651.2	587.1	270.4	499.5	598.6	597.9	546.5
1003.11	695.9	631.7	239.0	530.9	632.8	637.3	580.5
1035.51	732.7	668.5	255.4	542.3	653.8	645.2	583.1
1067.91	771.6	710.5	194.5	591.1	677.5	663.6	606.7
1100.31	797.1	747.2	178.8	619.9	680.1	674.1	614.5
1132.71	825.2	770.3	160.5	646.1	690.6	682.0	625.0
1165.11	871.2	806.0	142.1	677.5	727.4	700.3	625.0
1197.51	914.7	849.3	126.3	706.3	732.7	731.9	661.6
1229.91	950.5	879.9	110.5	735.1	771.5	755.3	693.0
1262.31	958.2	908.0	89.41	758.4	769.0	750.2	693.0
1294.71	955.6	902.9	73.36	781.3	794.5	755.3	677.3
1327.11	955.6	908.0	59.67	794.0	769.0	734.5	661.6
1359.51	965.8	915.6	43.25	801.6	756.2	716.1	648.5
1391.91	963.3	910.5	67.78	806.7	745.9	716.1	651.1
1424.31	955.6	910.5		804.2	735.3	700.3	635.4
1456.71	958.2	908.0		799.1	709.0	692.5	643.3
1489.11	963.3	902.9		801.6	774.1	729.2	656.4
1521.51	965.8	900.3		804.2	776.6	737.1	661.6
1553.91	973.5	910.5		801.6	743.2	718.7	677.3

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/72				D2-80051
APR					PAG 1
APR					FIG. 233
CONTRACT NO.					

U6 5553 7450

2-5000

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
1586.31	1022.	928.4		809.3	809.9	788.5	729.6
1618.71	1069.	969.2		824.5	838.0	834.5	770.9
1651.11	1103.	1013.		844.9	876.3	862.5	796.3
1683.51	1134.	1049.		870.3	914.7	890.6	819.2
1715.91	1134.	1070.		898.3	942.8	918.7	852.2
1748.31	1175.	1085.		926.3	976.0	946.8	875.1
1780.71	1214.	1116.		954.2	1015.	987.6	918.3
1813.11	1237.	1142.		984.7	1027.	997.8	933.6
1845.51	1271.	1175.		1013.	1064.	1024.	959.0
1877.91	1299.	1194.		1044.	1043.	1039.	989.5
1910.31	1330.	1219.		1072.	1103.	1083.	1015.
2264.01	1325.	1230.		1100.	993.9	951.9	895.5
2296.41	1369.	1245.		1103.	1043.	995.3	938.7
2328.81	1416.	1287.		1129.	1115.	1062.	987.0
2361.21	1449.	1323.		1155.	1139.	1091.	1023.
2393.61	1431.	1349.	254.7	1191.	1170.	1124.	1051.
2426.01	1426.	1364.	481.7	1216.	1196.	1145.	1085.
2458.41	1534.	1408.	652.1	1247.	1240.	1174.	1105.
2490.81	1544.	1436.	738.6	1278.	1266.	1202.	1131.
2523.21	1590.	1465.	764.3	1312.	1294.	1243.	1167.
2555.61	1614.	1498.	838.2	1343.	1333.	1269.	1201.
2588.01	1644.	1520.	886.6	1376.	1346.	1290.	1231.
2620.41	1673.	1549.	907.0	1402.	1377.	1318.	1260.
2652.81	1706.	1573.	922.3	1433.	1408.	1349.	1291.
2685.21	1734.	1605.	980.8	1459.	1418.	1373.	1322.
2717.61	1767.	1630.	917.2	1482.	1395.	1386.	1329.
2750.01	1756.	1632.	807.6	1492.	1444.	1386.	1319.
2782.41	1762.	1648.	707.9	1532.	1507.	1422.	1345.
2814.81	1759.	1662.	607.3	1559.	1491.	1406.	1334.
2847.21	1767.	1659.	521.0	1567.	1486.	1391.	1319.
2879.61	1778.	1670.	458.1	1577.	1473.	1388.	1319.
2912.01	1790.	1670.	373.3	1564.	1413.	1362.	1298.
2944.41	1812.	1678.	297.2	1537.	1449.	1380.	1314.
2976.81	1539.	1557.	244.2	1464.	927.4	854.9	814.1
3009.21	1323.	1349.	233.8	1314.	732.7	621.6	575.3
3041.61	1320.	1250.	220.7	1216.	871.2	752.8	664.2
3074.01	1317.	1214.	205.0	1160.	899.3	793.6	690.4
3106.41	1305.	1199.	189.3	1126.	899.3	806.4	750.6
3138.81	1292.	1183.	184.0	1113.	922.3	826.8	776.0
3171.21	1305.	1194.	186.7	1111.	968.3	877.9	819.2
CALC	06/25/82		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	EGBERT 4/29/82						
APR							
APR							
CONTRACT NO.					EWA 5-652 D2-80081 PA FIG. 234		

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
3203.61	1294.	1194.	173.6	1113.	958.1	870.2	831.9
3236.01	1307.	1199.	150.0	1113.	993.9	911.0	849.7
3268.41	1349.	1230.	138.8	1129.	1082.	1008.	933.6
3300.81	1395.	1268.	12.0	1160.	1128.	1049.	992.1
3333.21	1439.	1318.	92.05	1198.	1167.	1109.	1046.
3365.61	1473.	1359.	81.1	1232.	1196.	1135.	1064.
3398.01	1507.	1387.	65.15	1263.	1224.	1161.	1087.
3430.41	1539.	1421.	43.25	1294.	1242.	117.	1100.
3462.81	1568.	1452.		1319.	1255.	1192.	1126.
3495.21	1601.	1483.		1345.	1273.	1207.	1144.
3527.61	1628.	1509.		1368.	1299.	1230.	1170.
3560.01	1654.	1536.		1397.	1333.	1261.	1206.
3592.41	1687.	1565.		1420.	1364.	1295.	1242.
3624.81	1714.	1581.		1448.	1374.	1303.	1247.
3657.21	1742.	1616.		1474.	1403.	1339.	1280.
3689.61	1770.	1640.		1495.	1437.	1362.	1309.
3722.01	1795.	1656.		1516.	1424.	1360.	1309.
3754.41	1834.	1689.		1529.	1457.	1383.	1316.
3786.81	1848.	1702.		1537.	1442.	1380.	1309.
3819.21	1846.	1705.		1540.	1444.	1383.	1309.
3851.61	1848.	1708.		1553.	1447.	1380.	1316.
3884.01	1857.	1713.		1559.	1465.	1386.	1314.
3916.41	1873.	1727.		1561.	1403.	1362.	1316.
3948.81	1873.	1724.		1564.	1447.	1367.	1306.
3981.21	1868.	1727.	70.62	1564.	1460.	1380.	1316.
4013.61	1868.	1719.	94.68	1564.	1442.	1370.	1322.
4046.01	1862.	1719.	86.78	1564.	1449.	1383.	1314.
4078.41	1862.	1719.	128.9	1567.	1447.	1383.	1337.
4110.81	1862.	1719.	173.6	1567.	1457.	1388.	1324.
4143.21	1862.	1722.	228.5	1564.	1447.	1378.	1316.
4175.61	1862.	1713.	27.3	1564.	1434.	1365.	1304.
4208.01	1862.	1719.	319.0	1559.	1439.	1362.	1304.
4240.41	1862.	1716.	35.6	1559.	1447.	1367.	1309.
4272.81	1862.	1719.	362.4	1559.	1413.	1252.	1311.
4305.21	1865.	1722.	381.4	1559.	1455.	0.	1309.
4337.61	1862.	1716.	392.3	1561.	1439.	1373.	1314.
4370.01	1865.	1713.	403.0	1559.	1465.	1386.	1311.
4382.97	1862.	1713.	442.4	1559.	1455.	1383.	1311.
4399.17	1862.	1719.	497.4	1564.	1457.	1386.	1316.
4415.37	1862.	1719.	547.2	1564.	1452.	1386.	1309.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/2				
APR					
APR					DR-80081
					PAI
CONTRACT NO.					FIG. 235

U6 5553

2-5000

25/

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
4431.57	1862.	1719.	591.8	1564.	1452.	1375.	1316.
4447.77	1860.	1719.	625.8	1567.	1465.	1386.	1319.
4463.97	1860.	1710.	649.4	1567.	1468.	1391.	1319.
4480.17	1862.	1719.	678.3	1564.	1455.	1388.	1324.
4506.37	1862.	1719.	683.5	1567.	1478.	1396.	1324.
4512.57	1857.	1713.	688.8	1567.	1465.	1388.	1319.
4526.07	1857.	1719.	691.4	1564.	1449.	1378.	1311.
4527.15	1857.	1719.	691.4	1567.	1452.	1375.	1309.
4528.23	1857.	1713.	691.4	1567.	1457.	1378.	1311.
4529.31	1857.	1713.	691.4	1564.	1460.	1380.	1309.
4530.39	1857.	1710.	691.4	1567.	1460.	1380.	1304.
4546.59	1860.	1713.	688.8	1564.	1473.	1393.	1319.
4562.79	1857.	1713.	680.9	1564.	1449.	1380.	1319.
4578.99	1854.	1710.	667.8	1564.	1473.	1401.	1332.
4595.19	1860.	1710.	662.5	1564.	1457.	1393.	1334.
4611.39	1860.	1713.	644.2	1564.	1468.	1388.	1324.
4625.97	1857.	1716.	628.5	1561.	1465.	1391.	1322.
4627.05	1857.	1710.	628.5	1564.	1465.	1388.	1324.
4628.13	1857.	1713.	628.8	1564.	1468.	1391.	1322.
4629.21	1860.	1716.	628.5	1567.	1460.	1388.	1324.
4630.29	1862.	1716.	628.5	1564.	1434.	1386.	1329.
4646.49	1860.	1713.	618.4	1564.	1468.	1388.	1319.
4662.69	1857.	1713.	612.7	1564.	1473.	1393.	1324.
4678.89	1854.	1708.	612.7	1564.	1478.	1396.	1329.
4695.09	1854.	1710.	599.6	1564.	1468.	1388.	1314.
4711.29	1857.	1708.	570.8	1564.	1465.	1393.	1322.
4727.49	1851.	1708.	531.5	1564.	1468.	1388.	1322.
4743.69	1851.	1708.	500.0	1567.	1449.	1386.	1327.
4759.89	1860.	1716.	473.8	1567.	1475.	1396.	1329.
4776.09	1857.	1713.	447.6	1567.	1473.	1396.	1324.
4785.81	1857.	1713.	437.1	1569.	1478.	1393.	1324.
4786.89	1857.	1710.	437.1	1567.	1478.	1396.	1324.
4787.97	1854.	1710.	437.1	1564.	1481.	1396.	1324.
4789.05	1854.	1710.	437.1	1567.	1475.	1398.	1327.
4790.13	1854.	1713.	437.1	1567.	1478.	1398.	1324.
4806.33	1857.	1710.	431.9	1567.	1418.	1370.	1329.
4822.53	1854.	1708.	426.6	1569.	1437.	1380.	1324.
4838.73	1854.	1708.	421.4	1569.	1449.	1375.	1327.
4854.93	1854.	1710.	410.9	1564.	1465.	1380.	1324.
4871.13	1854.	1705.	400.4	1567.	1481.	1404.	1329.
CALC	06/25/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	EGBERT	6/29/72					
APR							
APR							
CONTRACT NO.					FIG. 236		

U6 5553 7450

2 5000

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
1887.33	1854.	1708.	173.8	1567.	1478.	1398.	1327.
1903.53	1857.	1708.	340.7	1567.	1478.	1396.	1319.
1919.73	1851.	1708.	310.8	1569.	1478.	1398.	1329.
1935.93	1851.	1708.	286.4	1567.	1473.	1396.	1329.
1952.13	1820.	1697.	265.2	1567.	1470.	1393.	1322.
1968.33	1818.	1694.	244.2	1564.	1470.	1401.	1329.
1984.53	1809.	1689.	220.7	1564.	1481.	1406.	1332.
1993.71	1809.	1683.	210.2	1564.	1473.	1398.	1324.
1994.79	1812.	1678.	212.8	1564.	1478.	1401.	1327.
1995.87	1809.	1683.	212.8	1564.	1481.	1401.	1324.
1996.95	1806.	1683.	207.6	1567.	1478.	1401.	1327.
1998.03	1801.	1681.	205.0	1564.	1481.	1401.	1327.
5014.23	1804.	1681.	181.0	1564.	1455.	1386.	1324.
5030.43	1801.	1672.	155.2	1564.	1452.	1378.	1316.
5046.63	1798.	1667.	139.5	1559.	1465.	1386.	1319.
5062.83	1798.	1670.	121.0	1559.	1470.	1391.	1322.
5079.03	1798.	1675.	113.1	1559.	1481.	1393.	1332.
5095.23	1792.	1675.	99.95	1561.	1473.	1391.	1327.
5111.43	1792.	1662.	89.41	1561.	1475.	1401.	1332.
5127.63	1790.	1664.	73.36	1556.	1465.	1396.	1332.
5143.23	1790.	1664.	56.91	1556.	1470.	1393.	1329.
5160.23	1792.	1664.	43.25	1556.	1473.	1388.	1329.
5176.23	1790.	1667.		1559.	1483.	1404.	1334.
5192.43	1790.	1656.		1559.	1473.	1398.	1334.
5208.63	1790.	1662.		1561.	1481.	1401.	1337.
5224.83	1792.	1662.		1564.	1486.	1401.	1332.
5241.03	1792.	1667.		1569.	1501.	1411.	1334.
5257.23	1790.	1664.		1580.	1475.	1396.	1329.
5273.43	1792.	1670.		1585.	1512.	1417.	1340.
5289.63	1792.	1667.		1591.	1507.	1406.	1340.
5305.83	1792.	1667.		1588.	1499.	1406.	1332.
5322.03	1790.	1670.		1585.	1499.	1414.	1337.
5330.67	1795.	1670.		1588.	1486.	1406.	1340.
5363.07	1798.	1678.		1585.	1504.	1411.	1337.
5395.47	1801.	1675.		1588.	1491.	1411.	1345.
5427.87	1804.	1672.		1588.	1486.	1406.	1337.
5460.27	1787.	1678.		1583.	1475.	1378.	1316.
5492.67	1681.	1619.		1556.	1364.	1264.	1201.
5525.07	1552.	1504.		1466.	1219.	1109.	1025.
5557.47	1544.	1447.		1407.	1224.	1124.	1059.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	FORBERT 4/29/12				D2-80081
APR					
APR					
CONTRACT NO.					FIG 237

TIME SEC.	3-2 T-01	4-2 T-02	7-2 T-03	8-2 T-04	3-3 T-05	4-3 T-06	7-3 T-07
-----DEGREES FAHRENHEIT-----							
5589.87	1544.	1431.		1376.	1198.	1135.	1072.
5622.27	1568.	1436.		1330.	1214.	1158.	1092.
5654.67	1457.	1403.		1299.	1097.	1016.	943.8
5687.07	1349.	1297.		1234.	1007.	877.9	776.0
5719.47	1346.	1250.		1183.	981.1	880.4	801.4
5751.87	1351.	1232.		1144.	976.0	903.4	852.2
5784.27	1361.	1230.		1119.	981.1	923.8	865.0
5816.67	1369.	1240.		1106.	993.9	936.6	872.6
5849.07	1253.	1217.		1098.	855.9	801.3	742.7
5881.47	1113.	1093.		1036.	727.4	626.8	549.1
5913.87	1121.	1041.		969.5	627.5	527.0	441.8
5946.27	1121.	1015.		921.2	614.3	534.9	499.4
5978.67	1110.	1005.		898.3	732.7	653.1	593.6
6011.07	1105.	994.7		885.6	706.4	647.8	604.1
6043.47	1113.	997.2		877.9	740.6	674.1	627.6
6075.87	1103.	1005.	40.52	872.8	740.6	689.8	648.5
6108.27	901.9	910.5	34.20	834.7	501.2	440.3	375.6
6140.67	799.7	818.7	59.67	786.4	374.1	319.3	275.4
6173.07	727.5	749.8	59.67	729.8	327.7	270.7	254.5
6205.47	669.6	679.0	65.15	680.1	289.6	254.9	246.7
6237.87	648.6	629.1	62.11	635.6	284.1	254.9	246.7
6270.27	651.2	608.1	59.67	596.4	292.3	257.6	254.5
6302.67	651.2	592.4	59.67	562.3	289.6	265.4	262.4
6335.07	651.2	579.2	56.94	538.8	292.3	273.3	265.0
6367.47	656.5	576.6	54.20	515.2	286.9	268.0	270.2
6431.01	627.5	558.2	86.78	486.4	273.5	254.9	246.7
6461.00	543.3	521.5	99.95	468.1	192.0	168.4	155.2
6491.21	493.4	479.5	110.5	444.6	168.4	142.1	129.0
6521.33	456.5	448.0	118.4	426.2	155.3	128.9	121.1
6551.15	432.9	416.5	131.6	402.7	147.4	123.6	115.8
6581.14	414.5	400.8	405.7	386.5	142.1	118.3	110.6
6610.87	390.4	379.0	584.1	362.1	139.4	118.3	110.6

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/82				
APR					02-80081
APR					PAGE 1
CONTRACT NO.					FIG. 238

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
.33	89.29	97.27	94.47	94.65	92.07	91.79	94.73
.87	86.65	94.63	97.11	92.02	92.07	91.79	94.73
33.27	105.1	97.27	97.11	94.65	97.33	94.44	94.73
65.67	150.0	102.5	102.4	105.2	113.1	105.0	97.37
98.07	163.1	105.2	105.0	113.1	115.8	113.0	105.3
130.47	157.9	113.1	107.7	115.7	121.0	113.0	110.5
16.87	128.9	113.1	110.3	115.7	115.8	113.0	113.2
195.27	139.4	113.1	115.6	113.1	115.8	113.0	113.2
227.67	202.5	123.6	123.6	118.4	118.4	118.3	121.1
260.07	265.4	150.0	144.7	128.9	123.7	134.1	139.5
292.47	319.3	173.6	165.8	142.1	134.2	150.0	163.1
324.87	365.6	202.4	189.4	157.9	147.4	168.4	189.2
357.27	390.1	231.2	210.4	176.2	163.1	184.2	215.4
389.67	429.8	260.0	234.1	191.9	178.8	202.6	238.9
422.07	464.0	289.2	265.6	212.9	199.7	226.3	267.7
454.47	487.6	321.8	292.4	236.4	218.0	247.3	297.1
486.87	495.5	349.0	319.6	262.6	246.8	271.0	326.9
519.27	519.1	378.9	349.6	289.2	267.8	295.2	356.8
537.63	529.6	395.2	366.0	300.0	283.6	308.8	373.1
905.91	343.8	370.8	368.7	332.6	310.8	322.4	373.1
938.31	458.7	381.6	379.6	335.4	316.2	330.6	383.9
970.71	545.4	416.4	404.0	357.1	337.9	363.4	415.9
1003.11	561.1	447.9	432.9	387.0	373.2	393.4	447.3
1035.51	569.0	474.1	456.6	411.1	400.3	422.6	473.5
1067.91	600.5	500.3	488.2	439.9	431.8	454.2	499.7
1100.31	600.5	526.6	511.9	468.7	463.2	483.1	531.1
1132.71	624.2	550.2	543.5	500.2	494.7	512.1	557.3
1165.11	611.0	573.8	561.9	526.4	523.5	541.0	580.9
1197.51	650.4	589.5	590.8	552.7	557.6	570.0	604.4
1229.91	689.8	621.0	625.0	589.4	594.2	606.9	635.9
1262.31	703.0	649.9	654.0	620.9	623.1	635.8	664.7
1294.71	650.4	663.0	664.5	634.0	625.7	641.1	680.4
1327.11	637.3	657.7	667.1	639.2	628.3	638.5	683.0
1359.51	639.9	660.3	669.7	639.2	625.7	633.2	685.6
1391.91	637.3	657.7	680.3	644.5	633.5	633.2	685.6
1424.31	634.7	657.7	672.4	644.5	630.9	633.2	683.0
1456.71	637.3	655.1	672.4	644.5	636.2	633.2	680.4
1489.11	626.8	657.7	672.4	647.1	636.2	633.2	683.0
1521.51	632.0	657.7	675.0	647.1	636.2	638.5	685.6
1553.91	642.5	657.7	680.3	647.1	638.8	641.1	688.2
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOYING COMPANY		
CHECK	SPICKLAND	7/20/2					
APR							
APR							
CONTRACT NO.					PAGE		
					F16.239		

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
1586.31	718.7	678.7	690.8	665.4	662.4	656.9	701.3
1618.71	765.5	704.9	717.1	696.9	701.7	696.4	727.5
1651.11	788.5	733.8	743.4	728.4	741.0	735.9	751.1
1683.51	811.5	759.7	769.2	757.0	769.2	764.4	781.6
1715.91	834.4	787.0	799.9	787.6	804.9	797.7	817.2
1748.31	867.6	820.9	833.1	818.2	832.9	833.5	845.2
1780.71	900.8	854.1	863.8	851.3	866.0	866.7	878.3
1813.11	916.1	884.7	891.9	879.3	899.1	894.9	908.8
1845.51	951.8	917.8	925.1	907.4	919.5	920.5	939.4
1877.91	974.8	943.3	950.7	935.4	955.1	948.6	967.3
1910.31	1003.	971.3	978.8	960.9	980.6	974.2	995.3
2264.01	898.2	976.4	999.3	986.4	1001.	984.4	1003.
2296.41	959.5	989.2	1015.	999.1	1022.	999.8	1011.
2328.81	990.1	1015.	1030.	1025.	1063.	1028.	1031.
2361.21	1021.	1038.	1061.	1053.	1096.	1067.	1062.
2393.61	1052.	1072.	1087.	1097.	1145.	1109.	1093.
2426.01	1083.	1103.	1129.	1146.	1205.	1158.	1129.
2458.41	1114.	1141.	1165.	1180.	1230.	1186.	1160.
2490.81	1140.	1172.	1201.	1211.	1261.	1215.	1191.
2523.21	1174.	1208.	1232.	1244.	1305.	1248.	1225.
2555.61	1199.	1239.	1266.	1278.	1336.	1280.	1253.
2588.01	1256.	1273.	1300.	1311.	1377.	1321.	1294.
2620.41	1259.	1312.	1339.	1345.	1416.	1357.	1328.
2652.81	1300.	1348.	1383.	1391.	1465.	1399.	1364.
2685.21	1334.	1384.	1419.	1420.	1486.	1417.	1392.
2717.61	1339.	1410.	1440.	1443.	1499.	1443.	1423.
2750.01	1316.	1418.	1450.	1438.	1486.	1440.	1433.
2782.41	1321.	1420.	1442.	1440.	1507.	1440.	1436.
2814.81	1334.	1423.	1458.	1453.	1512.	1448.	1439.
2847.21	1321.	1423.	1458.	1446.	1475.	1440.	1436.
2879.61	1308.	1415.	1442.	1425.	1455.	1414.	1423.
2912.01	1290.	1410.	1432.	1420.	1460.	1409.	1415.
2944.41	1305.	1405.	1427.	1415.	1450.	1409.	1415.
2976.81	854.9	1307.	1336.	1327.	1300.	1306.	1328.
3009.21	626.8	1144.	1196.	1175.	1135.	1124.	1181.
3041.61	658.3	1023.	1067.	1056.	1016.	987.0	1057.
3074.01	684.6	938.2	978.8	981.3	978.0	915.3	969.9
3106.41	768.1	905.0	948.1	958.3	975.5	905.1	934.3
3138.81	783.4	889.8	925.1	950.7	972.9	907.7	919.0
3171.21	819.1	889.8	922.6	955.8	988.2	923.0	919.0
CALC	06/25/12		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	STRICKLAND	7/20/62					
APR							
APR							
CONTRACT NO.					PAGE		
U0 5553 7450					FIG. 240		

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TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
3203.61	837.0	897.4	930.2	958.3	980.6	928.1	924.1
3236.01	860.0	907.6	937.9	958.3	972.9	933.2	931.7
3268.41	913.6	925.4	950.7	960.9	983.1	943.5	949.5
3300.81	995.2	968.8	983.9	991.5	1024.	979.3	982.6
3333.21	1031.	1005.	1020.	1038.	1081.	1028.	1024.
3365.61	1052.	1046.	1059.	1079.	1125.	1070.	1062.
3398.01	1062.	1077.	1092.	1115.	1166.	1109.	1098.
3430.41	1083.	1110.	1129.	1144.	1187.	1134.	1127.
3462.81	1111.	1134.	1155.	1172.	1220.	1163.	1155.
3495.21	1145.	1165.	1188.	1203.	1251.	1191.	1186.
3527.61	1166.	1201.	1225.	1239.	1295.	1228.	1217.
3560.01	1207.	1234.	1261.	1278.	1334.	1264.	1253.
3592.41	1225.	1270.	1300.	1311.	1372.	1300.	1289.
3624.81	1254.	1304.	1331.	1348.	1406.	1331.	1320.
3657.21	1282.	1335.	1364.	1389.	1455.	1373.	1351.
3689.61	1316.	1371.	1403.	1425.	1483.	1404.	1382.
3722.01	1321.	1400.	1427.	1430.	1470.	1417.	1402.
3754.41	1300.	1405.	1429.	1425.	1463.	1422.	1415.
3786.81	1308.	1400.	1427.	1415.	1445.	1412.	1413.
3819.21	1300.	1394.	1419.	1410.	1450.	1409.	1410.
3851.61	1305.	1392.	1416.	1402.	1442.	1409.	1413.
3884.01	1300.	1389.	1414.	1397.	1437.	1404.	1408.
3916.41	1318.	1389.	1414.	1399.	1445.	1409.	1413.
3948.81	1313.	1387.	1414.	1394.	1437.	1414.	1418.
3981.21	1305.	1389.	1408.	1394.	1437.	1404.	1413.
4013.61	1318.	1400.	1416.	1394.	1437.	1404.	1413.
4046.01	1303.	1400.	1414.	1397.	1434.	1404.	1413.
4078.41	1339.	1405.	1421.	1404.	1442.	1412.	1415.
4110.81	1313.	1400.	1416.	1397.	1434.	1407.	1418.
4143.21	1321.	1402.	1419.	1399.	1439.	1414.	1421.
4175.61	1298.	1400.	1416.	1399.	1434.	1414.	1415.
4208.01	1298.	1394.	1411.	1394.	1434.	1407.	1408.
4240.41	1298.	1389.	1411.	1397.	1424.	1404.	1410.
4272.81	1334.	1400.	1421.	1402.	1437.	1404.	1408.
4305.21	1287.	1394.	1414.	1399.	1434.	1401.	1405.
4337.61	1311.	1389.	1411.	1397.	1432.	1394.	1397.
4370.01	1282.	1381.	1406.	1394.	1434.	1394.	1395.
4382.97	1298.	1384.	1406.	1402.	1437.	1394.	1395.
4399.17	1300.	1387.	1403.	1399.	1445.	1399.	1397.
4415.37	1292.	1384.	1403.	1399.	1442.	1401.	1397.
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	BRICKLAND 7/2/6						
APR							
APR							
CONTRACT NO.					PAGE		
					FIG. 241		

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
4431.57	1303.	1384.	1406.	1402.	1445.	1401.	1400.
4447.77	1300.	1384.	1408.	1402.	1445.	1401.	1405.
4463.97	1292.	1384.	1406.	1399.	1445.	1399.	1405.
4480.17	1311.	1381.	1411.	1399.	1445.	1404.	1410.
4496.37	1298.	1384.	1406.	1399.	1442.	1404.	1410.
4512.57	1292.	1384.	1403.	1394.	1437.	1401.	1408.
4526.07	1300.	1384.	1408.	1397.	1439.	1399.	1408.
4527.15	1298.	1387.	1406.	1394.	1439.	1399.	1408.
4528.23	1300.	1384.	1408.	1397.	1439.	1396.	1408.
4529.31	1298.	1384.	1406.	1397.	1439.	1399.	1408.
4530.39	1290.	1384.	1406.	1397.	1439.	1399.	1408.
4546.59	1298.	1384.	1403.	1394.	1442.	1396.	1408.
4562.79	1300.	1384.	1408.	1399.	1442.	1396.	1408.
4578.99	1308.	1389.	1406.	1399.	1445.	1399.	1410.
4595.19	1308.	1387.	1414.	1399.	1439.	1404.	1413.
4611.39	1316.	1389.	1414.	1402.	1442.	1404.	1408.
4625.97	1308.	1392.	1411.	1399.	1445.	1399.	1413.
4627.05	1303.	1392.	1414.	1402.	1442.	1401.	1413.
4628.13	1308.	1392.	1411.	1399.	1445.	1401.	1410.
4629.21	1311.	1389.	1411.	1399.	1445.	1399.	1410.
4630.29	1311.	1389.	1408.	1399.	1445.	1399.	1410.
4646.49	1300.	1387.	1406.	1399.	1442.	1399.	1410.
4662.69	1287.	1381.	1403.	1394.	1437.	1394.	1408.
4678.89	1300.	1384.	1403.	1397.	1447.	1394.	1408.
4695.09	1300.	1381.	1406.	1399.	1447.	1399.	1410.
4711.29	1295.	1376.	1403.	1399.	1442.	1396.	1408.
4727.49	1308.	1381.	1408.	1399.	1445.	1396.	1408.
4743.69	1326.	1387.	1411.	1399.	1442.	1399.	1410.
4759.89	1308.	1389.	1411.	1399.	1447.	1399.	1413.
4776.09	1305.	1389.	1408.	1399.	1439.	1396.	1413.
4785.81	1305.	1389.	1411.	1399.	1434.	1394.	1413.
4786.89	1308.	1389.	1411.	1399.	1439.	1394.	1410.
4787.97	1308.	1389.	1411.	1397.	1439.	1394.	1410.
4789.05	1303.	1392.	1411.	1399.	1439.	1396.	1410.
4790.13	1305.	1389.	1411.	1399.	1439.	1396.	1408.
4806.33	1339.	1394.	1416.	1402.	1439.	1394.	1410.
4822.53	1323.	1402.	1419.	1402.	1437.	1396.	1415.
4838.73	1331.	1400.	1421.	1402.	1439.	1399.	1413.
4854.93	1323.	1402.	1419.	1402.	1439.	1399.	1415.
4871.13	1316.	1397.	1414.	1397.	1437.	1399.	1418.
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	STRICKLAND/bdaz						
APR							
APR							
CONTRACT NO.					PAGE 1		
258					FIG. 242		

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
4887.33	1305.	1392.	1408.	1397.	1437.	1394.	1418.
4903.53	1287.	1387.	1406.	1394.	1434.	1391.	1410.
4919.73	1308.	1387.	1403.	1391.	1437.	1391.	1410.
4935.93	1313.	1384.	1406.	1397.	1437.	1394.	1413.
4952.13	1308.	1387.	1411.	1399.	1437.	1394.	1413.
4968.33	1308.	1387.	1408.	1394.	1439.	1396.	1413.
4984.53	1308.	1392.	1411.	1399.	1437.	1394.	1415.
4993.71	1308.	1392.	1416.	1399.	1439.	1394.	1408.
4994.79	1311.	1392.	1414.	1399.	1437.	1394.	1410.
4995.87	1308.	1389.	1416.	1399.	1437.	1394.	1410.
4996.95	1308.	1394.	1414.	1399.	1437.	1391.	1408.
4998.03	1313.	1392.	1414.	1399.	1437.	1394.	1408.
5014.23	1321.	1394.	1414.	1399.	1439.	1396.	1410.
5030.43	1318.	1394.	1416.	1399.	1434.	1399.	1413.
5046.63	1316.	1400.	1419.	1402.	1437.	1401.	1410.
5062.83	1318.	1400.	1424.	1402.	1439.	1404.	1413.
5079.03	1321.	1405.	1424.	1404.	1434.	1401.	1418.
5095.23	1323.	1405.	1432.	1410.	1437.	1401.	1413.
5111.43	1323.	1405.	1429.	1407.	1442.	1396.	1415.
5127.63	1334.	1405.	1424.	1410.	1445.	1399.	1418.
5143.83	1316.	1407.	1424.	1410.	1439.	1401.	1418.
5160.03	1329.	1405.	1429.	1407.	1434.	1399.	1423.
5176.23	1321.	1410.	1429.	1404.	1437.	1396.	1418.
5192.43	1323.	1402.	1421.	1402.	1437.	1396.	1421.
5208.63	1318.	1402.	1421.	1402.	1439.	1396.	1421.
5224.83	1316.	1400.	1419.	1399.	1437.	1394.	1421.
5241.03	1311.	1400.	1419.	1399.	1437.	1391.	1418.
5257.23	1329.	1400.	1419.	1402.	1439.	1391.	1415.
5273.43	1318.	1394.	1414.	1402.	1439.	1391.	1418.
5289.63	1321.	1400.	1419.	1402.	1437.	1394.	1421.
5305.83	1316.	1400.	1416.	1399.	1437.	1391.	1415.
5322.03	1321.	1400.	1419.	1399.	1442.	1388.	1418.
5330.67	1323.	1397.	1421.	1402.	1442.	1391.	1421.
5363.07	1308.	1394.	1414.	1399.	1434.	1388.	1413.
5395.47	1318.	1389.	1408.	1397.	1442.	1388.	1408.
5427.87	1318.	1387.	1414.	1402.	1437.	1394.	1408.
5460.27	1298.	1389.	1411.	1397.	1432.	1391.	1402.
5492.67	1197.	1353.	1370.	1350.	1352.	1337.	1364.
5525.07	1000.	1255.	1282.	1260.	1238.	1225.	1279.
5557.47	1039.	1193.	1219.	1200.	1202.	1160.	1222.

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK BY	STICKLAND 7/20/72				D2-80081
APR					PAGE 1
APR					FIG. 243
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UG 5583 7450

2-5000

TIME SEC.	8-3 T-08	4-13 T-09	4-4 T-10	7-4 T-11	8-4 T-12	3-5 T-13	4-5 T-14
-----DEGREES FAHRENHEIT-----							
5589.87	1057.	1170.	1196.	1177.	1192.	1140.	1186.
5622.27	1078.	1159.	1181.	1167.	1192.	1142.	1178.
5654.67	905.9	1126.	1142.	1141.	1138.	1116.	1145.
5687.07	724.0	1020.	1054.	1043.	1011.	999.8	1049.
5719.47	786.0	956.0	996.7	983.8	980.6	933.2	987.7
5751.87	844.6	935.6	968.6	968.5	975.5	923.0	964.8
5784.27	860.0	935.6	958.4	963.4	972.9	923.0	954.6
5816.67	862.5	928.0	953.3	958.3	975.5	925.6	952.1
5849.07	721.3	900.0	930.2	943.1	929.6	910.2	929.2
5881.47	513.9	823.5	861.2	869.1	832.9	818.1	860.5
5913.87	429.8	752.1	792.2	795.2	769.2	738.5	784.1
5946.27	508.6	712.8	753.8	762.1	754.0	701.6	738.0
5978.67	595.3	699.7	735.5	749.4	748.8	693.7	722.3
6011.07	613.7	697.1	730.3	746.7	751.4	696.4	714.4
6043.47	629.4	697.1	730.3	746.7	751.4	699.0	714.4
6075.87	642.5	704.9	727.6	744.1	741.0	701.6	717.0
6108.27	365.6	644.6	680.3	696.9	667.6	646.4	667.3
6140.67	281.2	586.9	630.3	644.5	610.0	588.4	612.3
6173.07	265.4	542.3	582.9	597.3	562.8	543.7	567.8
6205.47	260.2	500.3	543.5	552.7	515.6	501.6	531.1
6237.87	262.8	468.8	509.2	521.2	489.4	470.0	489.2
6270.27	265.4	442.6	475.0	487.1	455.4	441.0	460.4
6302.67	265.4	416.4	454.0	458.3	431.8	417.3	434.2
6335.07	265.4	395.2	432.9	434.7	405.6	390.7	408.0
6367.47	268.0	376.2	406.6	411.1	384.1	371.6	392.1
6431.01	247.1	343.6	366.0	370.7	351.5	338.8	356.8
6461.00	157.9	319.1	344.2	348.9	329.8	319.7	329.6
6491.21	134.2	300.1	327.8	329.9	310.8	300.6	307.9
6521.33	123.6	281.0	306.0	310.9	294.5	287.0	286.2
6551.15	121.0	265.3	284.2	294.6	278.2	273.6	267.7
6581.14	121.0	246.9	273.5	278.3	265.1	257.8	254.6
6610.87	115.7	239.1	260.4	267.9	249.4	244.7	236.3

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	STRICKLAND/T/20/60				DR-80081
APR					PAGE
APR					FIG. 244
CONTRACT NO.					

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
.33	86.89	86.84	91.84	97.24	94.83	105.4	102.5
.87	86.89	89.47	91.84	94.60	97.46	105.4	102.5
33.27	105.3	123.7	91.84	102.5	97.46	163.0	134.2
65.67	150.0	191.8	97.13	123.6	100.1	277.7	213.0
98.07	163.1	225.8	105.1	147.4	108.0	331.6	239.2
130.47	150.0	215.4	113.0	168.4	118.5	310.0	223.4
162.87	129.0	163.1	120.9	165.7	121.1	223.0	173.6
195.27	139.5	181.4	126.2	173.6	126.4	256.8	192.0
227.67	189.2	225.8	134.1	186.7	134.2	334.3	313.9
260.07	246.7	275.5	144.7	202.4	144.7	409.7	416.7
292.47	291.5	307.9	157.9	215.5	157.8	467.1	490.2
324.87	337.6	394.8	181.5	241.8	181.3	587.1	574.3
357.27	362.0	429.0	215.7	292.0	217.9	636.6	605.8
389.67	389.1	457.8	255.1	324.6	257.0	670.6	642.6
422.07	426.2	520.6	297.8	403.4	296.8	722.7	689.8
454.47	441.9	515.4	341.4	442.8	334.7	727.9	700.3
486.87	447.1	531.1	382.3	476.9	372.7	756.5	742.4
519.27	468.0	541.6	419.7	497.9	407.6	779.3	768.1
537.63	481.1	557.3	438.1	516.3	428.5	799.5	788.5
905.91	302.4	367.6	467.1	529.4	478.2	566.2	532.3
938.31	402.6	447.3	469.7	547.8	480.8	675.8	718.7
970.71	483.7	573.0	488.1	584.5	496.5	804.6	849.8
1003.11	509.9	612.3	517.0	626.5	520.0	822.4	847.2
1035.51	507.3	622.8	551.2	663.3	546.1	835.0	860.0
1067.91	530.8	630.6	580.2	705.3	572.3	862.9	893.2
1100.31	543.9	643.7	609.1	734.1	595.8	868.0	898.3
1132.71	557.0	656.8	640.7	760.1	619.3	878.1	921.2
1165.11	559.6	683.0	667.0	793.3	640.2	898.4	905.9
1197.51	583.1	688.2	695.9	834.1	666.4	923.8	941.7
1229.91	617.2	730.1	722.2	864.7	689.9	961.8	987.6
1262.31	614.5	717.0	748.5	887.6	713.4	966.8	979.9
1294.71	588.4	740.6	771.6	885.1	731.7	966.8	951.9
1327.11	577.9	704.0	784.3	887.6	747.4	961.8	936.6
1359.51	570.1	696.1	792.0	890.2	757.7	951.6	921.2
1391.91	567.4	683.0	797.1	890.2	765.3	956.7	923.8
1424.31	559.6	677.8	792.0	887.6	770.4	941.5	903.4
1456.71	570.1	667.3	789.5	885.1	770.4	936.4	911.0
1489.11	575.3	709.2	786.9	885.1	772.9	964.3	939.1
1521.51	588.4	730.1	792.0	880.0	775.4	971.9	957.0
1553.91	596.2	704.0	799.7	885.1	780.5	966.8	939.1
CALC	06/25/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT 6/29/72				EWA NO. 05652		5-652
APR					COND. NO. 01		D2-80081
APR					THE BOEING COMPANY		PAC
CONTRACT NO.					FIG. 245		

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
1586.31	640.7	763.8	804.8	913.1	785.6	1025.	1026.
1618.71	685.2	804.5	820.1	951.4	795.8	1059.	1060.
1651.11	716.6	832.5	840.6	989.7	811.0	1087.	1080.
1683.51	745.4	868.1	868.7	1018.	833.9	1110.	1109.
1715.91	770.9	898.6	899.4	1039.	856.7	1138.	1132.
1748.31	796.3	939.4	922.4	1064.	877.0	1177.	1166.
1780.71	842.1	969.9	947.9	1093.	907.5	1210.	1197.
1813.11	847.2	990.2	983.7	1121.	935.5	1223.	1199.
1845.51	877.7	1018.	1017.	1152.	965.9	1259.	1243.
1877.91	913.3	1021.	1048.	1170.	993.9	1275.	1246.
1910.31	943.8	1075.	1079.	1199.	1022.	1313.	1285.
2204.01	809.1	926.6	1103.	1209.	1104.	1146.	1161.
2296.41	885.3	972.4	1108.	1230.	1115.	1195.	1205.
2328.81	910.8	1049.	1134.	1266.	1138.	1264.	1274.
2361.21	954.0	1073.	1167.	1302.	1166.	1290.	1290.
2393.61	984.5	1109.	1196.	1325.	1194.	1326.	1331.
2426.01	1028.	1132.	1227.	1333.	1225.	1339.	1349.
2458.41	1051.	1171.	1261.	1380.	1259.	1370.	1367.
2490.81	1067.	1191.	1292.	1403.	1292.	1398.	1391.
2523.21	1098.	1230.	1325.	1436.	1323.	1436.	1427.
2555.61	1139.	1268.	1361.	1465.	1359.	1462.	1442.
2588.01	1159.	1279.	1390.	1491.	1393.	1495.	1484.
2620.41	1203.	1312.	1416.	1517.	1421.	1508.	1499.
2652.81	1221.	1346.	1444.	1544.	1452.	1548.	1531.
2685.21	1257.	1364.	1470.	1565.	1485.	1578.	1558.
2717.61	1278.	1382.	1494.	1587.	1509.	1586.	1564.
2750.01	1278.	1395.	1509.	1595.	1530.	1580.	1550.
2782.41	1283.	1426.	1552.	1611.	1575.	1612.	1548.
2814.81	1257.	1402.	1577.	1624.	1613.	1607.	1542.
2847.21	1244.	1397.	1587.	1624.	1634.	1602.	1534.
2879.61	1242.	1384.	1593.	1635.	1645.	1594.	1531.
2912.01	1242.	1354.	1577.	1635.	1634.	1538.	1505.
2944.41	1250.	1390.	1560.	1624.	1621.	1583.	1537.
2976.81	748.0	822.3	1481.	1512.	1551.	974.5	928.9
3009.21	520.3	599.2	1330.	1300.	1441.	784.3	742.4
3041.61	583.1	743.2	1222.	1199.	1382.	1013.	870.2
3074.01	609.3	774.0	1157.	1165.	1344.	1025.	921.2
3106.41	690.4	791.8	1121.	1155.	1318.	1043.	1013.
3138.81	714.0	812.1	1103.	1152.	1295.	1051.	1031.
3171.21	745.4	863.0	1103.	1160.	1282.	1097.	1086.

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 4/29/72				DR-80527
APR					PA
APR					FIG. 246
CONTRACT NO.					

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
	-----DEGREES FAHRENHEIT-----						
3203.61	781.1	870.7	1108.	1168.	1269.	1095.	1073.
3236.01	801.4	896.1	1108.	1178.	1259.	1128.	1104.
3268.41	854.8	992.8	1121.	1199.	1259.	1226.	1189.
3300.81	931.1	1047.	1160.	1245.	1274.	1277.	1241.
3333.21	984.5	1106.	1201.	1292.	1292.	1318.	1282.
3365.61	994.7	1129.	1237.	1331.	1310.	1336.	1303.
3398.01	1020.	1155.	1271.	1356.	1328.	1352.	1313.
3430.41	1038.	1181.	1302.	1385.	1349.	1372.	1339.
3462.81	1069.	1191.	1328.	1413.	1367.	1390.	1365.
3495.21	1080.	1199.	1356.	1442.	1387.	1405.	1375.
3527.61	1100.	1225.	1377.	1467.	1411.	1426.	1398.
3560.01	1149.	1268.	1408.	1496.	1434.	1454.	1437.
3592.41	1190.	1294.	1437.	1523.	1457.	1480.	1473.
3624.81	1190.	1302.	1460.	1549.	1480.	1495.	1481.
3657.21	1229.	1341.	1486.	1576.	1503.	1527.	1507.
3689.61	1273.	1366.	1509.	1598.	1530.	1551.	1531.
3722.01	1252.	1364.	1531.	1619.	1551.	1564.	1529.
3754.41	1270.	1400.	1550.	1640.	1559.	1564.	1518.
3786.81	1252.	1382.	1560.	1651.	1565.	1567.	1523.
3819.21	1262.	1390.	1566.	1657.	1573.	1562.	1529.
3851.61	1268.	1390.	1574.	1659.	1589.	1586.	1548.
3884.01	1273.	1408.	1579.	1665.	1597.	1570.	1521.
3916.41	1273.	1364.	1587.	1673.	1605.	1570.	1529.
3948.81	1260.	1382.	1590.	1678.	1615.	1575.	1539.
3981.21	1270.	1390.	1587.	1675.	1618.	1570.	1531.
4013.61	1283.	1377.	1587.	1670.	1618.	1564.	1529.
4046.01	1275.	1387.	1587.	1667.	1621.	1567.	1523.
4078.41	1296.	1387.	1590.	1665.	1626.	1578.	1548.
4110.81	1270.	1400.	1590.	1662.	1629.	1570.	1531.
4143.21	1257.	1374.	1590.	1667.	1629.	1567.	1531.
4175.61	1244.	1364.	1585.	1665.	1629.	1548.	1505.
4208.01	1237.	1366.	1585.	1665.	1626.	1548.	1507.
4240.41	1255.	1377.	1582.	1662.	1626.	1562.	1521.
4272.81	1268.	1354.	1582.	1665.	1626.	1559.	1526.
4305.21	1270.	1390.	1582.	1662.	1629.	1564.	1526.
4337.61	1268.	1372.	1579.	1659.	1626.	1564.	1526.
4370.01	1270.	1397.	1582.	1662.	1626.	1567.	1507.
4382.97	1260.	1387.	1582.	1659.	1629.	1570.	1521.
4399.17	1288.	1397.	1585.	1665.	1631.	1570.	1521.
4415.37	1262.	1387.	1585.	1665.	1631.	1567.	1518.
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11		EWA 5-652
CHECK	EBBERT	6/29/62					
APR							
APR							
					THE BOEING COMPANY		DR-80081
							PAC
CONTRACT NO.							FIG. 247

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
4431.57	1268.	1382.	1587.	1665.	1631.	1570.	1529.
4447.77	1280.	1402.	1587.	1673.	1631.	1583.	1548.
4463.97	1291.	1413.	1585.	1667.	1631.	1580.	1539.
4480.17	1293.	1402.	1587.	1667.	1631.	1572.	1534.
4496.37	1293.	1415.	1590.	1665.	1634.	1580.	1539.
4512.57	1278.	1402.	1587.	1667.	1634.	1572.	1523.
4526.07	1262.	1387.	1587.	1667.	1634.	1564.	1515.
4527.15	1262.	1387.	1585.	1667.	1634.	1564.	1515.
4528.23	1262.	1387.	1587.	1667.	1634.	1567.	1510.
4529.31	1265.	1390.	1585.	1665.	1634.	1570.	1515.
4530.39	1273.	1395.	1587.	1667.	1631.	1570.	1513.
4546.59	1273.	1413.	1587.	1665.	1631.	1586.	1545.
4562.79	1260.	1382.	1587.	1665.	1631.	1567.	1510.
4578.99	1296.	1410.	1585.	1665.	1631.	1578.	1534.
4595.19	1311.	1400.	1587.	1665.	1631.	1578.	1526.
4611.39	1288.	1408.	1587.	1665.	1634.	1575.	1529.
4625.97	1278.	1400.	1587.	1665.	1631.	1583.	1542.
4627.05	1278.	1402.	1585.	1670.	1631.	1586.	1542.
4628.13	1278.	1402.	1587.	1665.	1634.	1588.	1542.
4629.21	1288.	1402.	1587.	1667.	1634.	1588.	1542.
4630.29	1293.	1395.	1585.	1667.	1634.	1586.	1542.
4646.49	1283.	1408.	1590.	1670.	1634.	1586.	1537.
4662.69	1273.	1408.	1587.	1670.	1637.	1580.	1531.
4678.89	1280.	1410.	1587.	1665.	1634.	1586.	1534.
4695.09	1260.	1402.	1587.	1665.	1634.	1583.	1529.
4711.29	1275.	1402.	1585.	1667.	1634.	1580.	1529.
4727.49	1268.	1402.	1587.	1670.	1637.	1586.	1534.
4743.69	1280.	1387.	1587.	1667.	1634.	1586.	1534.
4759.89	1283.	1415.	1587.	1670.	1637.	1594.	1550.
4776.09	1275.	1408.	1590.	1670.	1639.	1586.	1537.
4785.81	1283.	1413.	1587.	1667.	1639.	1586.	1531.
4786.89	1278.	1413.	1585.	1667.	1637.	1586.	1531.
4787.97	1280.	1410.	1587.	1665.	1637.	1586.	1529.
4789.05	1286.	1410.	1587.	1665.	1637.	1583.	1529.
4790.13	1286.	1410.	1587.	1667.	1637.	1583.	1529.
4806.33	1286.	1374.	1587.	1665.	1639.	1586.	1537.
4822.53	1275.	1390.	1587.	1667.	1642.	1591.	1537.
4838.73	1278.	1382.	1590.	1667.	1642.	1586.	1531.
4854.93	1270.	1400.	1590.	1667.	1642.	1591.	1545.
4871.13	1293.	1421.	1590.	1670.	1639.	1596.	1542.
CALC	06/25/12		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11		EWA 5-652
CHECK	EGBERT 10/22/12						
APR							
APR							02-80081
					THE BOEING COMPANY		PAGE
CONTRACT NO.							FIG. 248

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
-----DEGREES FAHRENHEIT-----							
4887.33	1283.	1418.	1593.	1670.	1637.	1591.	1542.
4903.53	1283.	1415.	1590.	1665.	1639.	1596.	1542.
4919.73	1283.	1418.	1590.	1665.	1642.	1594.	1545.
4935.93	1278.	1410.	1590.	1667.	1642.	1591.	1534.
4952.13	1265.	1408.	1590.	1662.	1642.	1594.	1534.
4968.33	1280.	1410.	1587.	1651.	1642.	1594.	1539.
4984.53	1278.	1415.	1585.	1648.	1642.	1596.	1539.
4993.71	1275.	1410.	1585.	1643.	1642.	1602.	1537.
4994.79	1278.	1410.	1585.	1643.	1642.	1599.	1537.
4995.87	1278.	1415.	1585.	1643.	1642.	1599.	1537.
4996.95	1280.	1423.	1582.	1648.	1642.	1602.	1539.
4998.03	1286.	1418.	1582.	1640.	1642.	1602.	1537.
5014.23	1270.	1397.	1579.	1640.	1642.	1599.	1542.
5030.43	1262.	1384.	1582.	1640.	1645.	1588.	1526.
5046.63	1268.	1400.	1577.	1638.	1645.	1594.	1526.
5062.83	1262.	1392.	1579.	1638.	1647.	1596.	1537.
5079.03	1278.	1410.	1577.	1638.	1647.	1596.	1537.
5095.23	1262.	1400.	1577.	1632.	1647.	1594.	1537.
5111.43	1288.	1410.	1574.	1638.	1647.	1591.	1542.
5127.63	1288.	1408.	1574.	1632.	1647.	1599.	1548.
5143.83	1270.	1402.	1574.	1627.	1645.	1594.	1531.
5160.03	1275.	1400.	1574.	1632.	1650.	1599.	1539.
5176.23	1283.	1413.	1574.	1635.	1650.	1602.	1542.
5192.43	1278.	1413.	1574.	1630.	1650.	1602.	1542.
5208.63	1280.	1413.	1577.	1632.	1653.	1599.	1534.
5224.83	1273.	1413.	1577.	1635.	1653.	1604.	1539.
5241.03	1278.	1418.	1587.	1635.	1669.	1612.	1539.
5257.23	1278.	1402.	1593.	1643.	1671.	1612.	1542.
5273.43	1286.	1433.	1601.	1648.	1677.	1618.	1545.
5289.63	1283.	1426.	1603.	1648.	1679.	1610.	1534.
5305.83	1293.	1423.	1601.	1651.	1677.	1607.	1531.
5322.03	1293.	1423.	1601.	1648.	1677.	1612.	1545.
5330.67	1288.	1408.	1603.	1646.	1679.	1607.	1542.
5363.07	1291.	1436.	1603.	1643.	1682.	1618.	1550.
5395.47	1304.	1426.	1606.	1643.	1685.	1618.	1550.
5427.87	1283.	1415.	1603.	1643.	1685.	1610.	1531.
5460.27	1278.	1400.	1606.	1643.	1685.	1578.	1507.
5492.67	1154.	1279.	1566.	1587.	1655.	1462.	1386.
5525.07	948.9	1114.	1470.	1465.	1583.	1336.	1225.
5557.47	992.1	1119.	1408.	1405.	1543.	1349.	1277.
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT	6/29/62			EWA NO. 05652 SPEC. 0302		
APR					COND. NO. 01 RUN 11		
APR					THE BOEING COMPANY		
CONTRACT NO.							EWA 5-652
							02-80081
							PAC
							F16.249

TIME SEC.	7-5 T-15	8-5 T-16	3-6 T-17	4-6 T-18	7-6 T-19	8-6 T-20	3-7 T-21
	-----DEGREES FAHRENHEIT-----						
5589.87	1005.	1119.	1364.	1393.	1511.	1346.	1303.
5622.27	1041.	1150.	1328.	1385.	1467.	1364.	1323.
5654.67	872.6	1006.	1305.	1362.	1426.	1221.	1127.
5687.07	695.7	888.5	1242.	1250.	1375.	1133.	969.7
5719.47	748.0	880.8	1180.	1201.	1323.	1123.	1044.
5751.87	791.3	891.0	1141.	1183.	1292.	1141.	1109.
5784.27	796.3	908.8	1113.	1183.	1256.	1149.	1122.
5816.67	816.7	929.2	1103.	1194.	1236.	1146.	1122.
5849.07	672.1	784.1	1087.	1178.	1207.	969.4	888.1
5881.47	478.5	625.4	1033.	1059.	1158.	880.7	737.1
5913.87	383.7	510.2	958.2	1002.	1107.	738.4	632.1
5946.27	462.6	533.7	909.6	976.9	1061.	766.6	750.2
5978.67	546.5	646.3	886.6	966.7	1038.	883.2	860.0
6011.07	562.2	633.3	871.2	964.1	1020.	857.8	865.1
6043.47	577.9	664.7	863.6	966.7	999.0	890.8	883.0
6075.87	585.8	677.8	863.6	979.4	986.3	895.9	877.9
6108.27	324.1	415.9	822.7	887.6	948.2	628.8	537.5
6140.67	241.5	291.7	769.0	798.4	899.9	498.4	448.2
6173.07	231.0	244.2	706.4	718.4	856.7	459.3	443.0
6205.47	225.8	228.5	648.6	655.4	816.1	448.8	445.6
6237.87	231.0	228.5	603.8	605.5	785.6	454.0	453.5
6270.27	236.2	233.7	564.4	579.3	755.1	454.0	456.1
6302.67	246.7	244.2	535.5	563.5	729.1	459.3	471.8
6335.07	249.3	252.0	514.4	555.6	705.6	459.3	469.2
6367.47	257.1	249.4	498.6	547.8	684.7	456.6	471.8
6431.01	225.8	231.1	469.7	537.3	642.9	422.7	421.9
6461.00	139.5	155.2	448.6	508.4	619.3	299.2	265.4
6491.21	121.1	128.9	427.6	471.7	598.4	262.0	218.2
6521.33	113.2	121.1	406.6	442.8	577.5	241.2	199.8
6551.15	110.6	118.4	385.0	411.3	556.6	233.4	189.3
6581.14	107.9	110.5	363.2	384.5	538.3	225.6	189.3
6610.07	107.9	113.2	346.8	360.0	522.6	217.7	181.5

CALC	06/25/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT	6/29/72				D2-80081
APR						PA. 2.500
APR						FIG. 250
CONTRACT NO.						

266

PIONEER BUSINESS FORMS

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
.33	107.8	94.68	97.43	97.11	105.0	92.03	92.14
.87	107.8	94.68	97.43	94.47	105.0	92.03	94.77
33.27	110.4	94.68	105.3	99.76	102.4	92.03	94.77
65.67	113.1	94.68	136.9	131.5	107.7	94.67	97.40
98.07	121.0	97.32	144.7	139.4	107.7	102.6	105.3
130.47	128.9	99.95	139.5	139.4	110.3	110.5	113.2
162.87	131.5	105.2	121.1	120.9	110.3	115.7	118.4
195.27	134.2	105.2	129.0	123.6	113.0	126.3	129.0
227.67	150.0	107.9	189.2	192.0	123.6	134.2	139.5
260.07	184.1	113.1	249.3	257.7	150.0	147.4	147.4
292.47	218.2	121.0	299.6	314.2	186.8	160.5	163.1
324.87	260.1	144.7	383.6	385.1	223.6	176.2	181.4
357.27	297.5	186.6	454.8	438.2	257.7	194.5	204.9
389.67	338.3	228.5	483.6	464.5	295.1	223.3	228.4
422.07	379.1	278.3	538.5	517.2	338.7	254.7	257.2
454.47	415.6	324.4	559.4	530.3	374.1	281.0	288.8
486.87	453.4	370.6	583.0	569.8	409.3	313.6	318.7
519.27	490.1	410.9	609.1	596.1	448.7	340.7	348.5
537.63	511.1	434.5	619.6	611.9	469.8	357.0	367.5
905.91	487.5	486.9	478.4	446.1	472.4	471.3	473.3
938.31	508.5	494.8	562.1	543.5	488.2	473.9	478.5
970.71	561.0	513.1	651.0	640.8	527.6	484.4	489.0
1003.11	605.7	539.3	664.1	646.1	564.5	497.5	502.1
1035.51	639.8	568.2	687.6	672.4	596.1	515.9	520.4
1067.91	679.2	597.0	721.6	717.1	630.3	536.8	544.0
1100.31	710.7	625.8	719.0	706.6	664.5	557.8	562.3
1132.71	742.2	654.7	745.1	738.2	701.3	584.0	585.8
1165.11	765.4	683.5	742.5	711.9	722.3	605.0	609.4
1197.51	785.8	715.0	796.1	779.4	748.7	628.6	635.6
1229.91	819.0	748.4	836.8	820.3	784.5	652.2	656.5
1262.31	844.5	774.5	882.5	858.7	812.6	678.4	682.7
1294.71	849.6	797.5	877.4	822.9	822.8	694.1	701.0
1327.11	844.5	812.7	885.1	820.3	820.3	707.2	714.1
1359.51	841.9	825.5	885.1	828.0	817.7	717.7	727.1
1391.91	836.8	835.7	885.1	820.3	815.2	725.6	735.0
1424.31	834.3	838.2	887.6	820.3	815.2	730.8	742.8
1456.71	834.3	838.2	874.9	815.2	812.6	733.5	748.1
1489.11	836.8	838.2	872.4	807.5	812.6	736.1	750.7
1521.51	839.4	840.7	880.0	805.0	815.2	741.3	755.8
1553.91	844.5	843.3	892.7	810.1	820.3	741.3	755.8
CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL			
CHECK	EGBERT 6/29/72			EWA NO. 05652 SPEC. 0302			
APR				COND. NO. 01 RUN 11			
APR				THE BOEING COMPANY			
CONTRACT NO.				EWA 5-652			
				DR-80081			
				PAG. 1			
				FIG. 251			

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
	-----DEGREES FAHRENHEIT-----						
1586.31	867.4	848.4	920.7	874.0	835.6	749.2	763.4
1618.71	900.6	856.0	946.1	904.7	863.7	756.9	773.6
1651.11	936.3	873.9	981.6	930.3	894.4	769.6	791.4
1683.51	964.4	896.8	1012.	955.8	927.7	787.4	806.6
1715.91	995.0	922.3	1030.	973.7	958.3	805.3	827.0
1748.31	1026.	950.3	1064.	1007.	991.6	825.7	847.3
1780.71	1052.	975.7	1102.	1038.	1025.	848.6	872.7
1813.11	1083.	1009.	1115.	1054.	1056.	871.5	898.2
1845.51	1111.	1042.	1151.	1098.	1092.	897.0	923.6
1877.91	1135.	1073.	1174.	1111.	1118.	925.0	949.0
1910.31	1166.	1107.	1180.	1142.	1149.	950.5	977.0
2264.01	1171.	1135.	1030.	1004.	1139.	1115.	1118.
2296.41	1184.	1138.	1046.	1033.	1149.	1125.	1129.
2328.81	1212.	1164.	1110.	1077.	1173.	1143.	1144.
2361.21	1246.	1197.	1133.	1108.	1201.	1167.	1167.
2393.61	1274.	1220.	1156.	1129.	1232.	1195.	1201.
2426.01	1310.	1249.	1177.	1150.	1269.	1223.	1232.
2458.41	1341.	1280.	1218.	1183.	1300.	1257.	1260.
2490.81	1370.	1313.	1262.	1219.	1325.	1288.	1293.
2523.21	1401.	1349.	1301.	1263.	1357.	1321.	1322.
2555.61	1429.	1380.	1332.	1289.	1385.	1352.	1355.
2588.01	1463.	1411.	1362.	1336.	1426.	1386.	1389.
2620.41	1494.	1437.	1380.	1346.	1458.	1419.	1420.
2652.81	1528.	1468.	1416.	1375.	1491.	1456.	1453.
2685.21	1558.	1494.	1440.	1401.	1518.	1484.	1487.
2717.61	1587.	1518.	1422.	1390.	1545.	1516.	1513.
2750.01	1593.	1534.	1442.	1393.	1553.	1542.	1540.
2782.41	1593.	1587.	1486.	1398.	1545.	1577.	1582.
2814.81	1595.	1619.	1486.	1398.	1545.	1607.	1606.
2847.21	1595.	1636.	1478.	1388.	1539.	1633.	1630.
2879.61	1587.	1646.	1478.	1388.	1529.	1655.	1649.
2912.01	1585.	1622.	1411.	1362.	1518.	1665.	1654.
2944.41	1590.	1587.	1440.	1372.	1520.	1663.	1652.
2976.81	1470.	1499.	923.2	899.6	1414.	1636.	1604.
3009.21	1313.	1337.	679.8	680.3	1250.	1574.	1537.
3041.61	1207.	1233.	918.1	828.0	1124.	1521.	1484.
3074.01	1142.	1184.	943.5	853.6	1033.	1466.	1438.
3106.41	1124.	1161.	996.9	922.6	1010.	1419.	1394.
3138.81	1119.	1156.	991.8	927.7	1012.	1383.	1358.
3171.21	1132.	1169.	1023.	968.6	1028.	1355.	1335.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/62				D2-80081
APR					
APR					
CONTRACT NO.					FIG. 252

CIT

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29 PROMETAL BUSINESS FORMS

TIME SEC.	4-7	7-7	8-7	3-8	4-8	7-8	8-8
	T-22	T-23	T-24	T-25	T-26	T-27	T-29
	-----DEGREES FAHRENHEIT-----						
3203.61	1135.	1179.	1035.	963.5	1043.	1332.	1312.
3236.01	1145.	1184.	1038.	968.6	1059.	1306.	1296.
3268.41	1160.	1202.	1100.	1041.	1077.	1296.	1286.
3300.81	1197.	1233.	1167.	1090.	1118.	1298.	1293.
3332.21	1235.	1270.	1200.	1129.	1162.	1309.	1306.
3365.61	1271.	1300.	1221.	1150.	1199.	1321.	1319.
3398.01	1297.	1326.	1229.	1157.	1227.	1337.	1335.
3430.41	1323.	1349.	1247.	1175.	1253.	1355.	1355.
3462.81	1354.	1375.	1257.	1196.	1284.	1373.	1376.
3495.21	1380.	1401.	1293.	1219.	1310.	1394.	1397.
3527.61	1411.	1427.	1324.	1253.	1341.	1417.	1417.
3560.01	1445.	1455.	1355.	1292.	1377.	1435.	1440.
3592.41	1478.	1481.	1375.	1307.	1414.	1461.	1461.
3624.81	1510.	1507.	1396.	1326.	1439.	1484.	1484.
3657.21	1539.	1534.	1427.	1357.	1468.	1507.	1510.
3689.61	1571.	1561.	1450.	1380.	1499.	1529.	1532.
3722.01	1585.	1585.	1445.	1383.	1520.	1548.	1545.
3754.41	1593.	1595.	1447.	1372.	1520.	1566.	1564.
3786.81	1595.	1601.	1429.	1364.	1518.	1582.	1574.
3819.21	1595.	1598.	1427.	1354.	1510.	1599.	1593.
3851.61	1601.	1611.	1422.	1367.	1518.	1615.	1609.
3884.01	1595.	1614.	1437.	1367.	1510.	1628.	1622.
3916.41	1601.	1617.	1419.	1364.	1520.	1641.	1630.
3948.81	1603.	1619.	1432.	1364.	1526.	1652.	1638.
3981.21	1601.	1619.	1447.	1372.	1523.	1657.	1644.
4013.61	1598.	1619.	1434.	1364.	1520.	1663.	1646.
4046.01	1598.	1614.	1437.	1370.	1518.	1663.	1652.
4078.41	1606.	1619.	1455.	1390.	1539.	1671.	1649.
4110.81	1603.	1619.	1460.	1388.	1529.	1668.	1657.
4143.21	1603.	1619.	1460.	1393.	1531.	1673.	1660.
4175.61	1595.	1614.	1442.	1370.	1529.	1673.	1660.
4208.01	1590.	1614.	1437.	1364.	1520.	1671.	1657.
4240.41	1587.	1614.	1429.	1357.	1507.	1673.	1657.
4272.81	1593.	1611.	1434.	1385.	1520.	1673.	1660.
4305.21	1590.	1611.	1432.	1354.	1510.	1676.	1662.
4337.61	1587.	1611.	1447.	1370.	1504.	1673.	1660.
4370.01	1582.	1609.	1434.	1357.	1496.	1676.	1665.
4382.97	1579.	1614.	1442.	1370.	1494.	1676.	1662.
4399.17	1582.	1614.	1440.	1364.	1499.	1679.	1662.
4415.37	1585.	1614.	1450.	1375.	1502.	1676.	1662.
CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL			EWA
				EWA NO. 05652 SPEC. 0302			5-652
				COND. NO. 01 RUN 11			D2-80081
APR				THE BOEING COMPANY			PAGE
							FIG. 253

607. 7450

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
4431.57	1587.	1611.	1437.	1367.	1507.	1676.	1665.
4447.77	1590.	1614.	1447.	1370.	1510.	1676.	1668.
4463.97	1593.	1614.	1442.	1375.	1515.	1679.	1671.
4480.17	1593.	1614.	1447.	1383.	1520.	1684.	1671.
4496.37	1595.	1614.	1447.	1375.	1520.	1679.	1671.
4512.57	1587.	1614.	1447.	1364.	1520.	1681.	1671.
4526.07	1585.	1611.	1437.	1377.	1520.	1681.	1671.
4527.15	1585.	1611.	1432.	1377.	1520.	1679.	1671.
4528.23	1587.	1614.	1437.	1375.	1520.	1681.	1671.
4529.31	1587.	1614.	1437.	1372.	1518.	1681.	1671.
4530.39	1585.	1611.	1437.	1367.	1518.	1684.	1671.
4546.59	1587.	1611.	1452.	1383.	1518.	1684.	1671.
4562.79	1587.	1609.	1452.	1388.	1520.	1681.	1671.
4578.99	1587.	1609.	1458.	1388.	1523.	1681.	1671.
4595.19	1593.	1606.	1442.	1383.	1526.	1681.	1673.
4611.39	1593.	1609.	1455.	1375.	1523.	1679.	1671.
4625.97	1593.	1611.	1450.	1388.	1529.	1681.	1673.
4627.05	1590.	1611.	1450.	1388.	1529.	1681.	1673.
4628.13	1587.	1609.	1447.	1385.	1526.	1681.	1671.
4629.21	1595.	1609.	1445.	1383.	1526.	1681.	1671.
4630.29	1590.	1611.	1447.	1383.	1526.	1681.	1671.
4646.49	1587.	1611.	1445.	1370.	1526.	1681.	1671.
4662.69	1587.	1609.	1452.	1383.	1520.	1681.	1673.
4678.89	1585.	1611.	1458.	1383.	1518.	1681.	1671.
4695.09	1585.	1614.	1452.	1375.	1518.	1681.	1668.
4711.29	1585.	1609.	1450.	1380.	1520.	1681.	1673.
4727.49	1585.	1611.	1460.	1383.	1520.	1684.	1676.
4743.69	1587.	1611.	1465.	1398.	1526.	1684.	1676.
4759.89	1590.	1614.	1465.	1390.	1526.	1684.	1673.
4776.09	1593.	1611.	1468.	1393.	1523.	1684.	1676.
4785.81	1590.	1614.	1463.	1388.	1520.	1684.	1673.
4786.89	1590.	1617.	1463.	1390.	1520.	1684.	1676.
4787.97	1587.	1614.	1465.	1390.	1520.	1684.	1679.
4789.05	1587.	1614.	1463.	1388.	1518.	1684.	1676.
4790.13	1587.	1614.	1463.	1390.	1520.	1687.	1676.
4806.33	1590.	1617.	1460.	1398.	1529.	1681.	1673.
4822.53	1590.	1617.	1463.	1396.	1529.	1681.	1676.
4838.73	1590.	1619.	1458.	1396.	1534.	1681.	1676.
4854.93	1590.	1619.	1468.	1398.	1531.	1684.	1676.
4871.13	1590.	1617.	1471.	1396.	1529.	1687.	1676.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 4/29/67				
APR					
APR					
CONTRACT NO.					FIG. 254

U6 5553 7450

2-5000

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
-----DEGREES FAHRENHEIT-----							
4887.33	1593.	1614.	1460.	1383.	1526.	1684.	1676.
4903.53	1590.	1614.	1458.	1377.	1523.	1681.	1676.
4919.73	1590.	1617.	1463.	1393.	1523.	1681.	1676.
4935.93	1590.	1614.	1463.	1398.	1526.	1681.	1679.
4952.13	1590.	1611.	1460.	1385.	1529.	1684.	1679.
4968.33	1590.	1609.	1465.	1385.	1526.	1687.	1679.
4984.53	1587.	1609.	1478.	1396.	1523.	1684.	1679.
4993.71	1585.	1606.	1478.	1403.	1526.	1687.	1679.
4994.79	1587.	1606.	1471.	1396.	1526.	1684.	1679.
4995.87	1587.	1606.	1468.	1398.	1526.	1684.	1679.
4996.95	1585.	1606.	1465.	1398.	1526.	1684.	1681.
4998.03	1587.	1609.	1465.	1403.	1523.	1684.	1681.
5014.23	1585.	1609.	1465.	1393.	1523.	1684.	1681.
5030.43	1585.	1609.	1460.	1396.	1523.	1687.	1681.
5046.63	1582.	1606.	1463.	1396.	1523.	1687.	1684.
5062.83	1582.	1603.	1473.	1406.	1526.	1687.	1681.
5079.03	1585.	1603.	1476.	1403.	1526.	1690.	1684.
5095.23	1585.	1603.	1468.	1403.	1526.	1687.	1681.
5111.43	1585.	1601.	1476.	1403.	1529.	1687.	1684.
5127.63	1593.	1601.	1463.	1408.	1534.	1690.	1684.
5143.83	1590.	1598.	1468.	1403.	1534.	1690.	1684.
5160.03	1590.	1598.	1460.	1403.	1539.	1690.	1687.
5176.23	1590.	1601.	1476.	1411.	1537.	1690.	1687.
5192.43	1593.	1603.	1465.	1398.	1537.	1692.	1687.
5208.63	1587.	1603.	1473.	1403.	1531.	1695.	1689.
5224.83	1587.	1603.	1476.	1406.	1534.	1695.	1689.
5241.03	1587.	1617.	1486.	1403.	1534.	1698.	1692.
5257.23	1587.	1628.	1478.	1403.	1537.	1703.	1697.
5273.43	1590.	1636.	1494.	1408.	1534.	1709.	1700.
5289.63	1590.	1641.	1489.	1406.	1539.	1714.	1705.
5305.83	1585.	1638.	1486.	1403.	1542.	1717.	1708.
5322.03	1587.	1638.	1491.	1414.	1537.	1717.	1708.
5330.67	1590.	1638.	1483.	1414.	1542.	1717.	1711.
5363.07	1587.	1641.	1486.	1398.	1531.	1717.	1708.
5395.47	1587.	1646.	1481.	1401.	1526.	1720.	1708.
5427.87	1587.	1646.	1486.	1403.	1520.	1723.	1708.
5460.27	1574.	1646.	1478.	1390.	1510.	1720.	1705.
5492.67	1523.	1619.	1398.	1315.	1471.	1703.	1684.
5525.07	1421.	1520.	1247.	1165.	1364.	1660.	1638.
5557.47	1375.	1471.	1277.	1188.	1313.	1617.	1596.

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 4/29/72				D2-80081
APR					
APR					
CONTRACT NO.					FIG. 255

TIME SEC.	4-7 T-22	7-7 T-23	8-7 T-24	3-8 T-25	4-8 T-26	7-8 T-27	8-8 T-29
	-----DEGREES FAHRENHEIT-----						
5589.87	1365.	1440.	1249.	1188.	1300.	1580.	1556.
5622.27	1367.	1386.	1247.	1196.	1292.	1540.	1521.
5654.67	1328.	1344.	1115.	1049.	1258.	1505.	1487.
5687.07	1220.	1280.	996.9	909.8	1134.	1456.	1440.
5719.47	1160.	1223.	1035.	958.4	1079.	1404.	1391.
5751.87	1153.	1184.	1053.	1002.	1069.	1365.	1355.
5784.27	1155.	1161.	1041.	994.2	1072.	1332.	1319.
5816.67	1155.	1146.	1035.	984.0	1074.	1301.	1293.
5849.07	1119.	1122.	877.4	828.0	1041.	1275.	1268.
5881.47	1023.	1061.	765.6	685.6	943.0	1239.	1232.
5913.87	944.0	996.1	648.4	580.3	861.2	1203.	1190.
5946.27	908.3	945.2	705.9	656.6	822.8	1159.	1149.
5978.67	903.2	922.3	801.2	771.8	815.2	1128.	1121.
6011.07	908.3	909.5	811.4	769.2	825.4	1097.	1093.
6043.47	913.4	904.4	816.4	776.9	833.1	1069.	1067.
6075.87	915.9	901.9	808.8	764.1	835.6	1050.	1046.
6108.27	844.5	858.6	522.8	485.6	764.0	1022.	1015.
6140.67	783.2	800.0	394.5	385.1	698.7	991.3	982.1
6173.07	729.1	733.3	367.4	382.3	643.4	960.7	949.0
6205.47	684.4	678.3	351.1	379.6	596.1	925.0	918.5
6237.87	650.3	625.8	362.0	390.5	559.2	897.0	888.0
6270.27	613.5	583.9	367.4	401.4	525.0	869.0	860.0
6302.67	592.5	552.4	362.0	393.2	496.1	843.5	832.0
6335.07	574.2	526.2	367.4	396.0	475.0	818.0	809.2
6367.47	550.5	505.3	367.4	398.7	454.0	792.5	783.7
6431.01	516.4	471.2	337.6	368.7	417.1	749.2	742.8
6461.00	490.1	452.8	225.8	223.6	393.2	728.2	716.7
6491.21	458.6	431.9	184.0	181.5	366.0	707.2	701.0
6521.33	435.0	408.3	165.7	163.1	341.4	688.9	682.7
6551.15	408.7	384.1	152.6	147.4	319.6	667.9	661.7
6581.14	392.7	362.4	144.7	136.8	300.5	652.2	646.0
6610.87	373.7	343.4	136.9	128.8	281.4	636.5	630.3

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 52652
CHECK	EGBERT 6/29/72				02-80061
APR					
APR					
CONTRACT NO.					PAGE FIG. 256

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FORMING BUSINESS FORMS

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
.33	97.14	97.08	97.44	97.72	97.35	102.7	97.47
.87	97.14	97.08	97.44	97.72	97.35	100.1	97.47
33.27	105.1	113.0	110.6	105.6	97.35	105.3	102.7
65.67	139.4	142.1	134.2	136.9	105.2	113.2	108.0
98.07	181.5	176.3	165.7	173.4	110.5	118.5	110.6
130.47	215.7	202.6	184.0	207.2	113.1	123.7	113.2
162.87	213.0	213.1	197.0	207.2	115.8	123.7	113.2
195.27	226.2	234.1	217.9	217.5	115.8	123.7	113.2
227.67	247.2	257.8	238.8	238.3	121.0	129.0	115.9
260.07	270.8	284.3	264.9	259.1	131.6	144.7	123.7
292.47	295.0	308.8	291.4	279.9	144.7	160.4	134.2
324.87	327.7	344.3	321.2	312.2	165.7	184.0	147.4
357.27	360.4	371.6	348.3	347.3	184.0	202.2	160.4
389.67	390.4	401.5	375.4	376.9	202.3	228.4	178.7
422.07	427.5	435.7	407.7	414.1	228.5	249.3	194.4
454.47	459.1	470.0	436.4	442.8	254.6	275.4	217.9
486.87	485.4	496.3	465.2	471.4	278.2	307.7	244.0
519.27	511.7	525.2	494.0	494.8	305.3	334.9	254.8
537.63	527.4	541.0	514.9	513.0	321.6	348.4	277.9
905.91	509.0	546.3	546.3	502.6	394.8	415.6	367.2
938.31	524.8	562.1	559.3	518.2	400.3	418.2	372.6
970.71	561.6	591.1	582.9	552.0	423.8	447.0	391.6
1003.11	603.7	620.0	609.0	588.4	450.0	475.8	410.2
1035.51	637.9	649.0	635.2	619.6	473.6	501.9	434.4
1067.91	664.2	680.6	661.3	648.2	497.2	530.7	446.7
1100.31	693.1	706.9	687.5	676.8	520.8	556.8	472.9
1132.71	716.8	728.0	713.6	697.7	544.3	583.0	493.8
1165.11	737.8	756.7	739.8	718.5	567.9	609.2	514.7
1197.51	761.2	782.3	765.5	739.3	586.2	627.5	533.0
1229.91	784.2	810.4	790.9	764.8	612.4	656.2	556.5
1262.31	789.3	815.6	803.6	769.9	638.6	682.4	582.6
1294.71	784.2	818.1	811.2	767.4	657.0	700.7	598.3
1327.11	773.9	813.0	811.2	764.8	664.8	708.5	611.4
1359.51	768.8	813.0	813.7	759.8	677.9	713.8	621.8
1391.91	766.3	810.4	816.3	757.3	680.5	719.0	629.7
1424.31	763.7	810.4	813.7	754.7	688.4	721.6	637.5
1456.71	763.7	810.4	816.3	757.3	691.0	724.2	642.7
1489.11	771.4	802.8	816.3	764.8	696.3	734.7	653.2
1521.51	766.3	807.9	816.3	759.8	701.5	737.3	655.8
1553.91	768.8	810.4	816.3	764.8	706.7	739.9	661.0
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT 1/20/62				EWA NO. 05652 SPEC. 0302		
APR					COND. NO. 01 RUN 11		
APR					THE BOEING COMPANY		
CONTRACT NO.					EWA 5-652		
					02-80031		
					PAG. 1		
					FIG. 257		

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36	
-----DEGREES FAHRENHEIT-----								
1586.31	794.4	833.5	834.1	782.5	717.2	752.9	671.5	
1618.71	830.1	864.2	859.5	820.4	738.2	773.3	687.2	
1651.11	865.9	892.3	884.7	850.8	758.9	798.7	702.9	
1683.51	886.4	917.9	907.8	871.0	781.8	821.6	721.1	
1715.91	909.4	943.5	933.2	896.3	804.7	847.0	744.7	
1748.31	932.4	974.2	966.2	919.0	825.0	872.4	765.1	
1780.71	957.9	997.2	986.5	944.3	850.5	895.3	785.4	
1813.11	986.0	1026.	1012.	972.1	875.9	923.2	810.8	
1845.51	1009.	1052.	1040.	994.8	903.9	946.1	833.7	
1877.91	1035.	1077.	1064.	1015.	926.8	974.1	856.6	
1910.31	1066.	1109.	1094.	1046.	949.8	999.5	881.9	
2264.01	1195.	1241.	1241.	1174.	1037.	1074.	978.4	
2296.41	1216.	1261.	1259.	1194.	1047.	1082.	986.1	
2328.81	1263.	1300.	1285.	1235.	1063.	1102.	998.8	
2361.21	1304.	1337.	1316.	1274.	1078.	1123.	1012.	
2393.61	1338.	1368.	1347.	1307.	1106.	1151.	1053.	
2426.01	1366.	1399.	1375.	1338.	1145.	1193.	1096.	
2458.41	1397.	1427.	1406.	1366.	1184.	1226.	1125.	
2490.81	1428.	1458.	1437.	1397.	1209.	1254.	1153.	
2523.21	1467.	1492.	1470.	1430.	1243.	1288.	1184.	
2555.61	1496.	1527.	1501.	1466.	1277.	1319.	1215.	
2588.01	1528.	1562.	1530.	1491.	1307.	1352.	1248.	
2620.41	1557.	1586.	1563.	1520.	1341.	1386.	1279.	
2652.81	1592.	1621.	1592.	1555.	1377.	1419.	1315.	
2685.21	1624.	1653.	1624.	1584.	1411.	1453.	1343.	
2717.61	1651.	1680.	1648.	1613.	1436.	1478.	1367.	
2750.01	1665.	1693.	1669.	1627.	1449.	1486.	1372.	
2782.41	1689.	1710.	1685.	1653.	1454.	1494.	1405.	
2814.81	1722.	1735.	1704.	1677.	1478.	1510.	1418.	
2847.21	1736.	1746.	1718.	1693.	1485.	1515.	1423.	
2879.61	1744.	1752.	1724.	1698.	1485.	1510.	1426.	
2912.01	1739.	1746.	1726.	1704.	1485.	1510.	1426.	
2944.41	1733.	1757.	1740.	1698.	1490.	1512.	1428.	
2976.81	1641.	1672.	1675.	1611.	1449.	1458.	1392.	
3009.21	1533.	1605.	1616.	1510.	1359.	1355.	1328.	
3041.61	1459.	1537.	1552.	1443.	1282.	1270.	1256.	
3074.01	1405.	1474.	1486.	1386.	1212.	1205.	1192.	
3106.41	1364.	1422.	1432.	1343.	1168.	1159.	1145.	
3138.81	1330.	1373.	1383.	1307.	1142.	1133.	1109.	
3171.21	1302.	1331.	1344.	1281.	1119.	1123.	1084.	
CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL				EWA
CHECK	EGBERT 6/27/72			EWA NO. 05652 SPEC. 0302				5-652
APR				COND. NO. 01 RUN 11				D2-80081
APR				THE BOEING COMPANY				PAC
CONTRACT NO.								FIG. 258

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
3203.61	1289.	1311.	1313.	1266.	1106.	1110.	1066.
3236.01	1286.	1300.	1303.	1261.	1093.	1105.	1050.
3268.41	1304.	1306.	1305.	1279.	1093.	1105.	1045.
3300.81	1338.	1331.	1321.	1312.	1099.	1118.	1042.
3333.21	1371.	1357.	1347.	1343.	1117.	1146.	1071.
3365.61	1395.	1388.	1367.	1371.	1145.	1177.	1099.
3398.01	1421.	1409.	1396.	1389.	1176.	1211.	1130.
3430.41	1444.	1438.	1416.	1409.	1202.	1234.	1145.
3462.81	1462.	1466.	1439.	1430.	1228.	1262.	1174.
3495.21	1483.	1487.	1468.	1450.	1253.	1288.	1205.
3527.61	1504.	1511.	1486.	1468.	1287.	1321.	1241.
3560.01	1522.	1529.	1509.	1486.	1323.	1355.	1274.
3592.41	1541.	1546.	1525.	1504.	1356.	1391.	1310.
3624.81	1563.	1567.	1544.	1520.	1390.	1422.	1346.
3657.21	1576.	1578.	1557.	1539.	1434.	1465.	1397.
3689.61	1592.	1594.	1576.	1555.	1472.	1499.	1431.
3722.01	1614.	1618.	1600.	1581.	1493.	1515.	1436.
3754.41	1651.	1653.	1629.	1616.	1501.	1520.	1436.
3786.81	1686.	1691.	1664.	1645.	1496.	1518.	1433.
3819.21	1702.	1710.	1683.	1664.	1493.	1518.	1426.
3851.61	1716.	1735.	1701.	1677.	1490.	1518.	1423.
3884.01	1725.	1741.	1713.	1688.	1485.	1512.	1421.
3916.41	1741.	1766.	1732.	1701.	1483.	1515.	1418.
3948.81	1744.	1769.	1735.	1698.	1485.	1518.	1418.
3981.21	1739.	1766.	1743.	1696.	1485.	1515.	1421.
4013.61	1733.	1766.	1746.	1696.	1485.	1512.	1418.
4046.01	1733.	1763.	1743.	1696.	1485.	1512.	1418.
4078.41	1733.	1763.	1743.	1696.	1490.	1515.	1421.
4110.81	1736.	1763.	1746.	1698.	1488.	1515.	1418.
4143.21	1739.	1766.	1749.	1704.	1485.	1515.	1415.
4175.61	1739.	1760.	1751.	1701.	1488.	1510.	1418.
4208.01	1736.	1763.	1746.	1704.	1485.	1510.	1421.
4240.41	1739.	1763.	1751.	1704.	1488.	1510.	1421.
4272.81	1739.	1766.	1746.	1701.	1488.	1510.	1421.
4305.21	1736.	1763.	1746.	1704.	1488.	1512.	1421.
4337.61	1736.	1763.	1749.	1701.	1485.	1510.	1421.
4370.01	1736.	1763.	1749.	1704.	1485.	1510.	1421.
4382.97	1736.	1769.	1746.	1704.	1480.	1510.	1421.
4399.17	1736.	1766.	1749.	1704.	1485.	1510.	1421.
4415.37	1741.	1763.	1751.	1709.	1485.	1510.	1421.
CAIC	06/25/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	EGBERT	6/29/72					
APR							
APR							
CONTRACT NO.					EWA 5-652		
					DR-80081		
					PAC		
					FIG 259		

TIME SEC.	3-9 T-30	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
4431.57	1739.	1763.	1746.	1704.	1483.	1510.	1421.
4447.77	1739.	1763.	1751.	1704.	1483.	1510.	1421.
4463.97	1736.	1763.	1749.	1709.	1480.	1510.	1421.
4480.17	1744.	1766.	1751.	1704.	1478.	1510.	1418.
4496.37	1736.	1763.	1749.	1704.	1478.	1510.	1418.
4512.57	1736.	1763.	1751.	1706.	1478.	1510.	1421.
4526.07	1739.	1763.	1751.	1704.	1478.	1507.	1418.
4527.15	1736.	1766.	1749.	1706.	1480.	1504.	1418.
4528.23	1736.	1763.	1746.	1704.	1478.	1510.	1418.
4529.31	1739.	1763.	1751.	1704.	1475.	1504.	1418.
4530.39	1739.	1763.	1746.	1704.	1475.	1504.	1418.
4546.59	1736.	1763.	1746.	1706.	1478.	1510.	1418.
4562.79	1736.	1763.	1751.	1704.	1480.	1507.	1418.
4578.99	1733.	1763.	1749.	1704.	1480.	1510.	1423.
4595.19	1733.	1763.	1751.	1704.	1480.	1510.	1421.
4611.39	1733.	1769.	1746.	1706.	1483.	1510.	1421.
4625.97	1733.	1766.	1749.	1704.	1480.	1507.	1421.
4627.05	1739.	1763.	1746.	1709.	1480.	1510.	1421.
4628.13	1736.	1766.	1749.	1706.	1480.	1510.	1421.
4629.21	1736.	1763.	1746.	1704.	1480.	1510.	1418.
4630.29	1736.	1766.	1751.	1704.	1480.	1510.	1421.
4646.49	1739.	1763.	1749.	1704.	1480.	1510.	1421.
4662.69	1733.	1760.	1743.	1704.	1478.	1510.	1421.
4678.89	1733.	1760.	1749.	1706.	1480.	1507.	1421.
4695.09	1736.	1766.	1749.	1704.	1478.	1504.	1421.
4711.29	1739.	1760.	1749.	1706.	1478.	1510.	1423.
4727.49	1736.	1763.	1746.	1704.	1475.	1504.	1421.
4743.69	1736.	1763.	1749.	1704.	1478.	1510.	1421.
4759.89	1739.	1763.	1746.	1704.	1480.	1510.	1423.
4776.09	1739.	1763.	1732.	1706.	1480.	1510.	1423.
4785.81	1736.	1757.	1746.	1706.	1483.	1510.	1423.
4786.89	1736.	1760.	1746.	1704.	1480.	1510.	1423.
4787.97	1736.	1760.	1749.	1706.	1480.	1510.	1423.
4789.05	1736.	1763.	1749.	1706.	1480.	1507.	1421.
4790.13	1739.	1760.	1749.	1706.	1483.	1510.	1421.
4806.33	1733.	1760.	1749.	1704.	1485.	1510.	1423.
4822.53	1736.	1763.	1749.	1706.	1485.	1510.	1423.
4838.73	1733.	1763.	1749.	1704.	1485.	1510.	1423.
4854.93	1736.	1766.	1749.	1704.	1483.	1510.	1421.
4871.13	1739.	1763.	1749.	1704.	1480.	1507.	1421.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/62				
APR					DZ-80081
APR					PAG.
CONTRACT NO.					FIG. 260

TIME SEC.	3-9 T-30 -	4-9 T-31	7-9 T-32	8-9 T-33	3-10 T-34	4-10 T-35	7-10 T-36
-----DEGREES FAHRENHEIT-----							
4887.33	1739.	1763.	1751.	1704.	1480.	1507.	1421.
4903.53	1733.	1763.	1749.	1704.	1480.	1510.	1418.
4919.73	1733.	1763.	1746.	1704.	1475.	1510.	1421.
4935.93	1736.	1763.	1749.	1706.	1475.	1504.	1418.
4952.13	1736.	1763.	1749.	1706.	1475.	1504.	1418.
4968.33	1739.	1763.	1751.	1706.	1475.	1504.	1418.
4984.53	1739.	1763.	1751.	1709.	1480.	1504.	1418.
4993.71	1739.	1763.	1751.	1706.	1478.	1510.	1418.
4994.79	1739.	1763.	1751.	1706.	1480.	1507.	1421.
4995.87	1736.	1763.	1754.	1706.	1480.	1504.	1418.
4996.95	1736.	1760.	1751.	1709.	1480.	1504.	1421.
4998.03	1739.	1760.	1751.	1706.	1480.	1510.	1423.
5014.23	1736.	1763.	1751.	1709.	1480.	1510.	1423.
5030.43	1739.	1763.	1749.	1706.	1480.	1504.	1421.
5046.63	1739.	1763.	1751.	1709.	1480.	1504.	1418.
5062.83	1741.	1763.	1751.	1706.	1480.	1504.	1418.
5079.03	1741.	1766.	1754.	1709.	1485.	1504.	1423.
5095.23	1739.	1763.	1751.	1712.	1483.	1502.	1423.
5111.43	1739.	1763.	1751.	1712.	1483.	1504.	1423.
5127.63	1739.	1763.	1751.	1709.	1483.	1507.	1423.
5143.83	1741.	1763.	1751.	1709.	1480.	1507.	1423.
5160.03	1744.	1763.	1754.	1709.	1485.	1507.	1426.
5176.23	1741.	1766.	1751.	1715.	1485.	1504.	1426.
5192.43	1744.	1766.	1751.	1712.	1485.	1504.	1426.
5208.63	1744.	1763.	1751.	1715.	1483.	1504.	1423.
5224.83	1747.	1763.	1754.	1715.	1480.	1504.	1418.
5241.03	1750.	1769.	1754.	1715.	1480.	1504.	1423.
5257.23	1755.	1766.	1751.	1720.	1483.	1510.	1426.
5273.43	1753.	1763.	1751.	1723.	1480.	1502.	1426.
5289.63	1761.	1769.	1754.	1726.	1480.	1507.	1423.
5305.83	1761.	1763.	1751.	1726.	1480.	1504.	1423.
5322.03	1755.	1763.	1751.	1726.	1480.	1502.	1423.
5330.67	1755.	1763.	1751.	1720.	1480.	1504.	1421.
5363.07	1753.	1763.	1749.	1720.	1485.	1502.	1423.
5395.47	1753.	1763.	1749.	1720.	1483.	1510.	1423.
5427.87	1755.	1757.	1749.	1717.	1485.	1512.	1423.
5460.27	1741.	1741.	1729.	1712.	1480.	1502.	1418.
5492.67	1667.	1675.	1677.	1640.	1460.	1465.	1390.
5525.07	1576.	1607.	2238	1560.	1400.	1398.	1346.
5557.47	1525.	1554.	1565.	1507.	1351.	1350.	1305.

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/67				
APR					D2-80091
APR					PAGE
CONTRACT NO.					FIG. 261

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TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
.33	97.52	97.27	99.83	97.27	97.43	102.4	105.1
.87	97.52	97.27	99.83	97.27	100.1	102.4	105.1
33.27	102.8	99.91	107.8	102.5	97.43	102.4	105.1
65.67	108.0	105.2	113.0	107.8	105.3	105.0	105.1
98.07	113.3	110.5	115.7	107.8	107.9	105.0	107.7
130.47	113.3	110.5	121.0	107.8	107.9	105.0	107.7
162.87	115.9	110.5	118.3	105.2	107.9	105.0	107.7
195.27	113.3	113.1	121.0	128.9	115.8	110.3	113.0
227.67	115.9	115.7	128.9	176.2	134.2	123.6	128.9
260.07	121.1	121.0	139.4	220.7	163.1	144.7	150.0
292.47	126.4	131.5	160.5	257.4	191.8	168.4	173.6
324.87	134.3	139.5	178.9	294.6	220.5	194.7	202.5
357.27	144.8	152.6	194.6	319.1	249.3	221.0	226.1
389.67	155.2	165.7	218.2	340.8	275.4	247.2	255.0
422.07	165.6	178.8	241.8	359.9	302.3	270.9	276.0
454.47	181.3	197.2	270.7	387.1	329.4	300.5	305.8
486.87	202.2	218.1	297.6	432.1	362.0	333.3	338.5
519.27	220.4	236.5	324.8	466.2	397.2	368.7	373.9
537.63	228.2	246.9	341.1	471.5	410.4	385.1	390.3
905.91	329.1	346.3	403.6	362.6	380.9	419.8	422.2
938.31	337.2	354.4	416.8	408.5	394.5	427.7	430.1
970.71	356.2	368.0	437.8	484.6	431.3	448.7	453.7
1003.11	367.0	384.4	466.7	531.8	467.9	477.7	482.6
1035.51	377.8	400.6	490.3	558.0	499.3	506.6	508.9
1067.91	396.7	416.4	514.0	576.4	528.1	530.3	537.8
1100.31	415.1	437.4	542.9	589.5	549.0	556.6	558.9
1132.71	433.4	458.4	569.2	613.1	572.5	585.6	585.2
1165.11	451.7	479.3	592.8	639.3	598.7	609.2	614.1
1197.51	470.0	497.7	613.8	662.9	624.9	638.2	640.4
1229.91	493.5	521.3	640.1	689.2	648.4	664.5	666.7
1262.31	511.7	542.3	669.0	694.4	666.7	688.2	690.3
1294.71	530.0	560.7	684.7	665.6	669.3	696.1	698.2
1327.11	543.1	576.4	692.6	652.5	666.7	704.0	703.5
1359.51	556.1	586.9	697.9	636.7	661.5	704.0	703.5
1391.91	569.2	597.4	703.1	631.5	658.9	704.0	700.8
1424.31	577.0	607.9	708.4	631.5	656.2	701.3	703.5
1456.71	584.8	615.8	711.0	634.1	656.2	698.7	700.8
1489.11	592.7	623.6	716.3	631.5	656.2	701.3	700.8
1521.51	603.1	628.9	721.5	636.7	656.2	701.3	700.8
1553.91	608.3	631.5	721.5	649.8	661.5	704.0	706.1
CALC	06/25/72		REVISED	DATE	CORRUGATED SHEAR WEB PANEL		
CHECK	EGBERT	6/29/72			EWA NO. 05652		
APR					COND. NO. 01		
APR					SPEC. 0302		
					RUN 11		
					THE BOEING COMPANY		
					PAGE		
CONTRACT NO.					FIG. 263		

507.1

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
1586.31	616.2	720.7	742.5	715.4	690.2	722.4	727.1
1618.71	631.8	655.1	760.6	759.7	721.6	748.7	750.8
1651.11	642.3	670.8	783.6	790.3	755.5	774.3	776.3
1683.51	655.3	689.2	806.6	808.2	780.9	797.3	804.4
1715.91	676.2	707.6	827.0	838.7	806.3	822.9	829.9
1748.31	694.5	728.6	852.5	859.1	831.7	851.0	852.9
1780.71	715.4	746.9	878.1	899.9	864.8	876.6	883.6
1813.11	736.3	770.0	901.0	971.3	918.1	925.1	932.1
1845.51	757.0	792.9	929.1	1051.	986.8	981.4	990.9
1877.91	779.8	813.3	954.7	1038.	1015.	1023.	1027.
1910.31	797.5	836.2	977.6	1051.	1028.	1051.	1055.
2264.01	911.7	950.9	1058.	1064.	1028.	1111.	1118.
2296.41	916.8	958.6	1063.	1146.	1087.	1162.	1172.
2328.81	926.9	971.3	1081.	1167.	1118.	1196.	1208.
2361.21	942.2	984.1	1104.	1193.	1149.	1230.	1239.
2393.61	982.7	1015.	1145.	1229.	1180.	1263.	1270.
2426.01	1034.	1059.	1187.	1250.	1211.	1292.	1301.
2458.41	1067.	1100.	1218.	1278.	1241.	1326.	1337.
2490.81	1096.	1126.	1246.	1309.	1270.	1359.	1368.
2523.21	1124.	1157.	1277.	1319.	1293.	1388.	1397.
2555.61	1155.	1188.	1308.	1350.	1321.	1411.	1420.
2588.01	1188.	1221.	1342.	1389.	1357.	1445.	1454.
2620.41	1216.	1255.	1376.	1418.	1386.	1473.	1480.
2652.81	1252.	1296.	1412.	1446.	1414.	1504.	1511.
2685.21	1281.	1322.	1440.	1464.	1437.	1529.	1538.
2717.61	1304.	1348.	1461.	1472.	1460.	1550.	1559.
2750.01	1301.	1353.	1463.	1456.	1458.	1561.	1562.
2782.41	1332.	1376.	1489.	1498.	1476.	1574.	1584.
2814.81	1360.	1400.	1497.	1480.	1478.	1580.	1589.
2847.21	1363.	1405.	1497.	1516.	1504.	1606.	1619.
2879.61	1363.	1410.	1495.	1487.	1491.	1609.	1613.
2912.01	1365.	1410.	1495.	1487.	1491.	1609.	1619.
2944.41	1368.	1412.	1495.	1490.	1494.	1609.	1616.
2976.81	1329.	1376.	1438.	1211.	1360.	1523.	1519.
3009.21	1270.	1314.	1339.	1056.	1226.	1416.	1412.
3041.61	1214.	1255.	1257.	971.3	1133.	1315.	1314.
3074.01	1165.	1201.	1195.	907.6	1051.	1232.	1231.
3106.41	1124.	1157.	1153.	922.9	1012.	1170.	1169.
3138.81	1085.	1123.	1127.	986.6	1017.	1149.	1154.
3171.21	1054.	1100.	1114.	1043.	1041.	1157.	1162.

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/20/72				
APR					
APR					
					PA
CONTRACT NO.					FIG 264

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
3203.61	1029.	1077.	1101.	1041.	1046.	1160.	1167.
3236.01	1011.	1056.	1091.	1043.	1048.	1162.	1169.
3268.41	998.0	1048.	1091.	1095.	1077.	1178.	1182.
3300.81	992.9	1043.	1104.	1152.	1118.	1206.	1216.
3333.21	1018.	1061.	1135.	1170.	1141.	1232.	1239.
3365.61	1049.	1090.	1169.	1214.	1177.	1261.	1270.
3398.01	1078.	1118.	1202.	1214.	1195.	1284.	1291.
3430.41	1096.	1136.	1220.	1237.	1216.	1305.	1309.
3462.81	1121.	1162.	1254.	1278.	1247.	1336.	1343.
3495.21	1152.	1190.	1282.	1304.	1275.	1364.	1371.
3527.61	1188.	1227.	1316.	1314.	1296.	1385.	1392.
3560.01	1222.	1260.	1352.	1322.	1306.	1398.	1402.
3592.41	1260.	1296.	1388.	1366.	1337.	1424.	1431.
3624.81	1299.	1338.	1425.	1394.	1365.	1455.	1464.
3657.21	1353.	1384.	1469.	1428.	1398.	1486.	1493.
3689.61	1389.	1420.	1500.	1469.	1432.	1523.	1535.
3722.01	1391.	1436.	1505.	1436.	1435.	1534.	1543.
3754.41	1386.	1436.	1505.	1492.	1460.	1555.	1568.
3786.81	1378.	1428.	1500.	1472.	1465.	1572.	1578.
3819.21	1371.	1420.	1497.	1516.	1494.	1598.	1613.
3851.61	1363.	1415.	1495.	1492.	1494.	1609.	1621.
3884.01	1358.	1412.	1492.	1492.	1491.	1615.	1624.
3916.41	1358.	1410.	1492.	1490.	1491.	1615.	1624.
3948.81	1355.	1410.	1495.	1477.	1486.	1609.	1616.
3981.21	1355.	1410.	1497.	1482.	1489.	1609.	1616.
4013.61	1353.	1410.	1492.	1482.	1489.	1606.	1616.
4046.01	1353.	1407.	1492.	1482.	1486.	1609.	1616.
4078.41	1355.	1410.	1497.	1485.	1486.	1606.	1616.
4110.81	1347.	1407.	1495.	1469.	1483.	1604.	1608.
4143.21	1353.	1405.	1495.	1477.	1481.	1598.	1608.
4175.61	1353.	1405.	1492.	1477.	1481.	1601.	1608.
4208.01	1353.	1407.	1495.	1487.	1486.	1601.	1610.
4240.41	1358.	1410.	1495.	1480.	1486.	1604.	1613.
4272.81	1360.	1412.	1495.	1482.	1486.	1606.	1613.
4305.21	1360.	1412.	1495.	1480.	1483.	1604.	1613.
4337.61	1360.	1412.	1492.	1480.	1483.	1604.	1613.
4370.01	1360.	1410.	1489.	1477.	1486.	1604.	1613.
4382.97	1360.	1412.	1492.	1482.	1486.	1606.	1613.
4399.17	1360.	1410.	1492.	1482.	1486.	1604.	1610.
4415.37	1360.	1410.	1492.	1480.	1486.	1604.	1610.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/62				
APR					
APR					
CONTRACT NO.					PAGE 1 176265

TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
4431.57	1360.	1412.	1489.	1482.	1483.	1606.	1613.
4447.77	1360.	1410.	1492.	1480.	1483.	1604.	1613.
4463.97	1360.	1410.	1489.	1482.	1487.	1606.	1616.
4480.17	1358.	1410.	1489.	1482.	1489.	1604.	1613.
4496.37	1358.	1410.	1489.	1480.	1486.	1606.	1613.
4512.57	1360.	1412.	1489.	1487.	1489.	1606.	1613.
4526.07	1358.	1410.	1489.	1480.	1486.	1604.	1613.
4527.15	1360.	1407.	1484.	1480.	1486.	1604.	1613.
4528.23	1358.	1410.	1487.	1482.	1486.	1604.	1613.
4529.31	1360.	1407.	1489.	1482.	1486.	1604.	1613.
4530.39	1358.	1410.	1487.	1482.	1486.	1606.	1613.
4546.59	1360.	1407.	1487.	1482.	1486.	1604.	1613.
4562.79	1363.	1407.	1484.	1480.	1486.	1604.	1613.
4578.99	1360.	1412.	1489.	1487.	1486.	1604.	1613.
4595.19	1363.	1410.	1489.	1485.	1486.	1604.	1613.
4611.39	1360.	1410.	1489.	1482.	1486.	1604.	1613.
4625.97	1363.	1412.	1489.	1485.	1489.	1604.	1613.
4627.05	1360.	1412.	1489.	1482.	1486.	1606.	1613.
4628.13	1360.	1410.	1489.	1482.	1489.	1606.	1613.
4629.21	1363.	1410.	1489.	1482.	1486.	1604.	1610.
4630.29	1363.	1412.	1489.	1480.	1486.	1604.	1613.
4646.49	1365.	1410.	1487.	1477.	1486.	1604.	1613.
4662.69	1360.	1410.	1487.	1477.	1486.	1604.	1613.
4678.89	1363.	1410.	1487.	1480.	1491.	1604.	1610.
4695.09	1360.	1410.	1484.	1480.	1486.	1604.	1613.
4711.29	1360.	1412.	1487.	1482.	1486.	1606.	1613.
4727.49	1363.	1410.	1489.	1485.	1486.	1606.	1613.
4743.69	1363.	1412.	1489.	1485.	1489.	1606.	1613.
4759.89	1365.	1412.	1487.	1482.	1489.	1604.	1613.
4776.09	1365.	1412.	1487.	1474.	1489.	1606.	1613.
4785.81	1365.	1415.	1489.	1482.	1491.	1604.	1613.
4786.89	1365.	1415.	1489.	1482.	1489.	1606.	1613.
4787.97	1363.	1415.	1489.	1482.	1489.	1601.	1613.
4790.05	1363.	1412.	1487.	1482.	1489.	1609.	1613.
4790.13	1363.	1412.	1487.	1482.	1491.	1606.	1613.
4806.33	1363.	1415.	1489.	1480.	1489.	1601.	1608.
4822.53	1365.	1415.	1489.	1480.	1491.	1604.	1610.
4838.73	1360.	1415.	1489.	1480.	1489.	1866.	1613.
4854.93	1360.	1415.	1487.	1482.	1486.	1606.	1613.
4871.13	1360.	1412.	1484.	1482.	1489.	1606.	1610.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/62				
APR					
APR					
CONTRACT NO.					D2-80081 FIG 266

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TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
4887.33	1358.	1412.	1487.	1482.	1489.	1606.	1613.
4903.53	1358.	1410.	1487.	1482.	1486.	1606.	1616.
4919.73	1360.	1410.	1487.	1480.	1489.	1606.	1613.
4935.93	1360.	1412.	1484.	1480.	1486.	1604.	1613.
4952.13	1360.	1410.	1487.	1485.	1489.	1606.	1616.
4968.33	1360.	1410.	1484.	1485.	1489.	1604.	1613.
4984.53	1363.	1410.	1484.	1482.	1491.	1604.	1613.
4993.71	1360.	1410.	1487.	1482.	1496.	1606.	1610.
4994.79	1360.	1410.	1484.	1482.	1491.	1606.	1616.
4995.87	1360.	1410.	1484.	1482.	1491.	1606.	1613.
4996.95	1360.	1412.	1484.	1482.	1491.	1604.	1613.
4998.03	1360.	1412.	1487.	1482.	1491.	1604.	1613.
5014.23	1360.	1415.	1489.	1480.	1489.	1604.	1610.
5030.43	1360.	1412.	1484.	1480.	1486.	1604.	1613.
5046.63	1358.	1412.	1484.	1480.	1489.	1606.	1613.
5062.83	1360.	1412.	1484.	1480.	1491.	1606.	1613.
5079.03	1360.	1412.	1482.	1482.	1486.	1609.	1613.
5095.23	1363.	1412.	1484.	1480.	1486.	1604.	1613.
5111.43	1360.	1412.	1484.	1482.	1491.	1604.	1613.
5127.63	1360.	1412.	1487.	1482.	1489.	1606.	1613.
5143.83	1358.	1412.	1484.	1482.	1491.	1606.	1613.
5160.03	1360.	1412.	1484.	1480.	1489.	1606.	1613.
5176.23	1360.	1415.	1482.	1485.	1489.	1606.	1613.
5192.43	1363.	1412.	1484.	1487.	1491.	1606.	1613.
5208.63	1358.	1412.	1484.	1487.	1491.	1606.	1616.
5224.83	1358.	1410.	1482.	1485.	1494.	1606.	1619.
5241.03	1358.	1412.	1482.	1482.	1489.	1606.	1613.
5257.23	1358.	1412.	1482.	1480.	1486.	1604.	1610.
5273.43	1360.	1412.	1482.	1482.	1486.	1604.	1613.
5289.63	1358.	1412.	1487.	1482.	1486.	1606.	1613.
5305.83	1355.	1412.	1484.	1485.	1489.	1606.	1613.
5322.03	1358.	1412.	1484.	1485.	1491.	1606.	1613.
5330.67	1358.	1412.	1484.	1485.	1489.	1606.	1613.
5363.07	1363.	1412.	1487.	1480.	1489.	1606.	1610.
5395.47	1363.	1412.	1489.	1477.	1489.	1604.	1610.
5427.87	1363.	1415.	1489.	1482.	1486.	1606.	1613.
5460.27	1355.	1405.	1484.	1456.	1481.	1598.	1602.
5492.67	1327.	1384.	1443.	1322.	1406.	1542.	1546.
5525.07	1283.	1335.	1381.	1157.	1296.	1447.	1441.
5557.47	1250.	1299.	1332.	1196.	1265.	1401.	1400.
CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	EGBERT	6/29/62					
APR							
APR							
CONTRACT NO.					F16267		

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TIME SEC.	8-10 T-37	3-11 T-38	4-11 T-39	7-11 T-40	8-11 T-41	3-12 T-42	4-12 T-43
-----DEGREES FAHRENHEIT-----							
5589.87	1219.	1268.	1306.	1237.	1265.	1383.	1387.
5622.27	1193.	1245.	1288.	1250.	1267.	1380.	1387.
5654.67	1168.	1219.	1264.	1118.	1216.	1341.	1345.
5687.07	1124.	1170.	1197.	971.3	1118.	1261.	1260.
5719.47	1088.	1131.	1148.	945.8	1059.	1201.	1200.
5751.87	1060.	1103.	1122.	999.3	1051.	1175.	1177.
5784.27	1034.	1079.	1104.	1030.	1061.	1168.	1172.
5816.67	1013.	1056.	1094.	1041.	1061.	1165.	1169.
5849.07	992.9	1038.	1078.	945.8	1023.	1139.	1143.
5881.47	957.4	999.4	1016.	805.6	933.4	1077.	1076.
5913.87	919.3	961.1	964.9	725.9	864.8	1012.	1006.
5946.27	891.4	930.6	926.6	725.9	821.6	966.0	965.3
5978.67	866.0	905.1	908.7	775.0	824.1	948.1	950.0
6011.07	848.3	889.8	898.5	808.2	831.7	943.0	947.4
6043.47	830.5	871.9	885.7	820.9	836.8	943.0	947.4
6075.87	812.8	856.6	880.6	810.7	834.3	937.9	944.9
6108.27	789.9	828.6	839.8	652.5	760.6	891.9	891.2
6140.67	764.6	800.5	798.9	579.0	703.3	843.3	845.3
6173.07	738.9	770.0	765.7	537.0	653.6	797.3	796.7
6205.47	712.8	741.7	724.2	508.2	614.4	753.8	758.4
6237.87	686.7	715.4	697.9	479.3	580.4	717.1	719.2
6270.27	660.6	689.2	666.4	455.7	549.0	680.3	682.4
6302.67	634.4	657.7	640.1	437.4	522.8	675.0	648.3
6335.07	608.3	636.7	613.8	421.6	499.3	614.5	619.3
6367.47	582.8	607.9	587.5	400.6	473.1	585.6	590.4
6431.01	545.7	565.9	545.5	373.5	439.1	535.6	540.5
6461.00	530.0	547.5	527.1	346.3	418.2	514.5	519.4
6491.21	514.3	531.8	506.1	321.8	394.5	493.5	495.8
6521.33	496.1	513.4	487.7	302.8	375.5	475.0	480.0
6551.15	480.4	495.1	469.3	291.9	359.2	456.6	459.0
6581.14	462.1	479.3	453.6	275.8	345.7	438.2	443.2
6610.87	446.5	463.6	435.2	265.3	326.7	419.8	424.8

CALC	06/25/12	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT. 6/9/12				
APR					
APR					
CONTRACT NO.					FIG 268

UG 5553 7450

2-5000

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
.33	99.89	102.8
.87	99.89	102.8
33.27	102.5	105.4
45.67	107.8	108.0
98.07	107.8	113.3
130.47	110.4	113.3
162.87	107.8	110.7
195.27	115.7	123.8
227.67	139.5	165.6
260.07	165.7	207.3
292.47	197.2	241.2
324.87	231.2	283.1
357.27	265.3	312.8
389.67	292.0	339.9
422.07	319.2	364.2
454.47	349.1	396.6
486.87	384.4	438.5
519.27	421.7	472.5
537.63	434.8	485.5
905.91	395.3	399.4
938.31	408.6	428.1
970.71	448.0	493.3
1003.11	489.9	540.3
1035.51	524.1	574.2
1067.91	550.3	597.7
1100.31	571.3	613.4
1132.71	597.5	639.5
1165.11	626.4	668.2
1197.51	647.4	689.1
1229.91	673.6	715.2
1262.31	694.6	730.8
1294.71	694.6	715.2
1327.11	692.0	702.1
1359.51	684.1	691.7
1391.91	678.9	683.9
1424.31	678.9	681.2
1456.71	678.9	683.9
1489.11	671.0	683.9
1521.51	678.9	686.5
1553.91	684.1	696.9

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/72				
APR					
APR					
CONTRACT NO.					PAGE FIG 269

U6 5553 7450

2-5000

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
1586.31	713.0	749.1
1618.71	749.7	787.2
1651.11	782.9	822.7
1683.51	808.4	848.0
1715.91	836.4	875.9
1748.31	861.9	901.3
1780.71	897.6	939.3
1813.11	956.3	1008.
1845.51	1023.	1088.
1877.91	1044.	1082.
1910.31	1062.	1098.
2264.01	1069.	1111.
2296.41	1137.	1190.
2328.81	1160.	1216.
2361.21	1199.	1244.
2393.61	1230.	1280.
2426.01	1261.	1306.
2458.41	1291.	1339.
2490.81	1325.	1373.
2523.21	1348.	1386.
2555.61	1377.	1421.
2588.01	1413.	1460.
2620.41	1444.	1491.
2652.81	1475.	1514.
2685.21	1496.	1538.
2717.61	1514.	1549.
2750.01	1514.	1536.
2782.41	1541.	1576.
2814.81	1541.	1568.
2847.21	1573.	1608.
2879.61	1557.	1576.
2912.01	1552.	1573.
2944.41	1552.	1576.
2976.81	1408.	1326.
3009.21	1255.	1162.
3041.61	1152.	1070.
3074.01	1064.	992.6
3106.41	1028.	992.6
3138.81	1038.	1039.
3171.21	1069.	1095.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/20/62				
APR					
APR					
CONTRACT NO.					122-80001 PAC FIG 270

U6 5553 7450

2-5000

27176

286

PIONEER BUSINESS FORMS

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
3203.61	1082.	1103.
3236.01	1090.	1111.
3268.41	1116.	1154.
3300.81	1162.	1211.
3333.21	1188.	1234.
3365.61	1227.	1275.
3398.01	1248.	1280.
3430.41	1266.	1303.
3462.81	1297.	1342.
3495.21	1328.	1370.
3527.61	1353.	1386.
3560.01	1353.	1391.
3592.41	1387.	1429.
3624.81	1423.	1465.
3657.21	1452.	1496.
3689.61	1496.	1541.
3722.01	1493.	1520.
3754.41	1519.	1570.
3786.81	1525.	1554.
3819.21	1557.	1597.
3851.61	1552.	1581.
3884.01	1552.	1576.
3916.41	1557.	1573.
3948.81	1546.	1562.
3981.21	1544.	1565.
4013.61	1546.	1568.
4046.01	1546.	1568.
4078.41	1546.	1568.
4110.81	1538.	1554.
4143.21	1541.	1560.
4175.61	1541.	1560.
4208.01	1544.	1568.
4240.41	1544.	1565.
4272.81	1546.	1568.
4305.21	1544.	1565.
4337.61	1536.	1562.
4370.01	1544.	1562.
4382.97	1544.	1565.
4399.17	1544.	1565.
4415.37	1544.	1562.

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY
CHECK	EGBERT 4/29/72			
APR				
APR				
CONTRACT NO.				FIG 211

U6 5553 7450

2-5000

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
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4431.57	1544.	1565.
4447.77	1544.	1565.
4463.97	1536.	1565.
4480.17	1546.	1568.
4496.37	1544.	1568.
4512.57	1544.	1562.
4526.07	1544.	1565.
4527.15	1541.	1562.
4528.23	1544.	1562.
4529.31	1544.	1565.
4530.39	1544.	1562.
4546.59	1544.	1565.
4562.79	1544.	1565.
4578.99	1544.	1565.
4595.19	1546.	1568.
4611.39	1546.	1565.
4625.97	1546.	1570.
4627.05	1549.	1568.
4628.13	1549.	1568.
4629.21	1549.	1568.
4630.29	1549.	1568.
4646.49	1546.	1565.
4662.69	1544.	1565.
4678.89	1544.	1562.
4695.09	1544.	1565.
4711.29	1544.	1565.
4727.49	1546.	1568.
4743.69	1546.	1570.
4759.89	1546.	1568.
4776.09	1546.	1565.
4785.81	1544.	1562.
4786.89	1544.	1565.
4787.97	1544.	1568.
4789.05	1546.	1568.
4790.13	1546.	1565.
4806.33	1544.	1568.
4822.53	1546.	1568.
4838.73	1546.	1568.
4854.93	1549.	1570.
4871.13	1549.	1565.

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA
CHECK	EGREAT 6/29/67				5-652
APR					D2-80081
APR					PAI
CONTRACT NO.					F16 272

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F				
4887.33	1549.	1568.				
4903.53	1546.	1568.				
4919.73	1546.	1568.				
4935.93	1544.	1568.				
4952.13	1549.	1570.				
4968.33	1546.	1568.				
4984.53	1546.	1570.				
4993.71	1549.	1568.				
4994.79	1544.	1568.				
4995.87	1552.	1573.				
4996.95	1549.	1570.				
4998.03	1546.	1570.				
5014.23	1549.	1570.				
5030.43	1549.	1568.				
5046.63	1552.	1570.				
5062.83	1552.	1568.				
5079.03	1557.	1578.				
5095.23	1557.	1570.				
5111.43	1552.	1570.				
5127.63	1549.	1568.				
5143.83	1554.	1576.				
5160.03	1557.	1576.				
5176.23	1557.	1573.				
5192.43	1552.	1573.				
5208.63	1557.	1573.				
5224.83	1557.	1570.				
5241.03	1557.	1573.				
5257.23	1549.	1573.				
5273.43	1552.	1570.				
5289.63	1549.	1573.				
5305.83	1557.	1576.				
5322.03	1557.	1576.				
5330.67	1557.	1576.				
5363.07	1552.	1570.				
5395.47	1549.	1570.				
5427.87	1552.	1568.				
5460.27	1544.	1554.				
5492.67	1465.	1427.				
5525.07	1338.	1267.				
5557.47	1297.	1275.				
CALC	06/25/2		REVISED	DATE		
CHECK	EGREKT	6/29/62			CORRUGATED SHEAR WEB PANEL	
APR					EWA NO. 05652 SPEC. 0302	
APR					COND. NO. 01 RUN 11	
					THE BOEING COMPANY	
CONTRACT NO.					EWA 5-652	
					D2-92081	
					F16273	

TIME SEC.	7-12 T-44 DEG F	8-12 T-45 DEG F
5589.87	1304.	1314.
5622.27	1310.	1326.
5654.67	1258.	1221.
5687.07	1142.	1072.
5719.47	1075.	1028.
5751.87	1072.	1059.
5784.27	1082.	1095.
5816.67	1093.	1106.
5849.07	1059.	1036.
5881.47	961.4	903.8
5913.87	879.8	822.7
5946.27	839.0	794.8
5978.67	841.5	832.8
6011.07	851.7	860.7
6043.47	861.9	878.5
6075.87	867.0	878.5
6108.27	788.0	746.5
6140.67	720.9	668.2
6173.07	665.8	616.0
6205.47	618.5	574.2
6237.87	581.8	540.3
6270.27	550.3	511.6
6302.67	524.1	485.5
6335.07	500.4	467.2
6367.47	479.4	446.4
6431.01	437.5	412.4
6461.00	416.5	388.5
6491.21	395.3	364.2
6521.33	376.3	348.0
6551.15	357.2	329.0
6581.14	343.6	318.2
6610.87	327.3	307.4

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/72				
APR					
APR					
CONTRACT NO.					02-80081 PAC FIG 274

U6 5553 7450

2 3000

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
.33	0.009-	0.001	0.001-	0.003	0.003-	0.007-	0.003-
.87	0.009-	0.005	0.000-	0.003	0.000	0.001-	0.001
33.27	0.015-	0.009	0.001	0.007	0.000	0.000	0.005-
65.67	0.013-	0.003	0.001-	0.007	0.003	0.000	0.000-
98.07	0.013-	0.001	0.000-	0.003	0.001	0.003	0.003
130.47	0.009-	0.000	0.005-	0.005	0.000	0.003-	0.003-
162.87	0.005-	0.001	0.001-	0.010	0.001	0.001	0.001-
195.27	0.013-	0.009	0.003-	0.012	0.007	0.003	0.000
227.67	0.015-	0.003	0.007-	0.005	0.005	0.005-	0.003
260.07	0.013-	0.011	0.000	0.014	0.003	0.000	0.000-
292.47	0.025-	0.009	0.001	0.010	0.007	0.003	0.003
324.87	0.019-	0.013	0.003-	0.020	0.011	0.001-	0.003
357.27	0.025-	0.022	0.005-	0.023	0.014	0.003-	0.006
389.67	0.017-	0.026	0.007-	0.032	0.014	0.003-	0.003
422.07	0.029-	0.024	0.009-	0.040	0.018	0.003-	0.003
454.47	0.021-	0.035	0.009-	0.041	0.021	0.000	0.005
486.87	0.025-	0.047	0.015-	0.047	0.012	0.005-	0.001
519.27	0.029-	0.048	0.013-	0.054	0.023	0.001-	0.000
537.63	0.025-	0.054	0.013-	0.052	0.020	0.007-	0.006
905.91	0.023-	0.056	0.013-	0.060	0.016	0.017-	0.006
938.31	0.027-	0.060	0.015-	0.061	0.021	0.023-	0.010
970.71	0.025-	0.069	0.017-	0.072	0.021	0.017-	0.006
1003.11	0.025-	0.075	0.013-	0.080	0.023	0.011-	0.003
1035.51	0.029-	0.080	0.019-	0.078	0.023	0.021-	0.008
1067.91	0.035-	0.088	0.017-	0.090	0.029	0.023-	0.008
1100.31	0.031-	0.095	0.019-	0.090	0.025	0.025-	0.008
1132.71	0.027-	0.099	0.009-	0.098	0.029	0.027-	0.008
1165.11	0.035-	0.103	0.019-	0.107	0.036	0.017-	0.008
1197.51	0.039-	0.099	0.015-	0.109	0.034	0.025-	0.012
1229.91	0.045-	0.116	0.015-	0.118	0.032	0.029-	0.012
1262.31	0.041-	0.126	0.011-	0.118	0.036	0.029-	0.012
1294.71	0.045-	0.122	0.013-	0.119	0.029	0.036-	0.010
1327.11	0.039-	0.129	0.019-	0.121	0.036	0.034-	0.013
1359.51	0.035-	0.122	0.019-	0.125	0.029	0.034-	0.010
1391.91	0.041-	0.118	0.019-	0.130	0.036	0.035-	0.015
1424.31	0.043-	0.118	0.019-	0.119	0.032	0.036-	0.013
1456.71	0.043-	0.124	0.022-	0.129	0.034	0.038-	0.015
1489.11	0.039-	0.127	0.020-	0.132	0.034	0.042-	0.015
1521.51	0.041-	0.129	0.022-	0.129	0.036	0.038-	0.012
1553.91	0.045-	0.120	0.019-	0.127	0.034	0.046-	0.017

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 SPEC. 0302 RUN 11 THE BOEING COMPANY	EWA
CHECK	ERBERT				5-652
APP	7-5-62				
APP					
CONTRACT NO.					FIG 275

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
1586.31	0.035-	0.135	0.019-	0.138	0.036	0.038-	0.013
1618.71	0.035-	0.141	0.015-	0.143	0.042	0.042-	0.012
1651.11	0.045-	0.135	0.019-	0.150	0.042	0.042-	0.017
1683.51	0.045-	0.144	0.015-	0.145	0.043	0.036-	0.017
1715.91	0.039-	0.148	0.011-	0.158	0.047	0.044-	0.018
1748.31	0.039-	0.161	0.009-	0.170	0.045	0.046-	0.017
1780.71	0.049-	0.165	0.013-	0.178	0.049	0.050-	0.017
1813.11	0.045-	0.176	0.019-	0.179	0.054	0.050-	0.017
1845.51	0.049-	0.178	0.020-	0.181	0.054	0.054-	0.017
1877.91	0.049-	0.186	0.015-	0.192	0.062	0.054-	0.017
1910.31	0.049-	0.189	0.015-	0.199	0.060	0.058-	0.017
2264.01	0.053-	0.205	0.026-	0.221	0.060	0.069-	0.024
2296.41	0.055-	0.206	0.026-	0.229	0.065	0.067-	0.020
2328.81	0.051-	0.220	0.030-	0.239	0.069	0.073-	0.020
2361.21	0.053-	0.223	0.026-	0.241	0.071	0.077-	0.017
2393.61	0.063-	0.227	0.022-	0.245	0.076	0.073-	0.024
2426.01	0.061-	0.240	0.022-	0.261	0.076	0.077-	0.020
2458.41	0.063-	0.246	0.026-	0.276	0.078	0.083-	0.024
2490.81	0.059-	0.250	0.026-	0.281	0.080	0.085-	0.024
2523.21	0.063-	0.267	0.026-	0.294	0.078	0.095-	0.022
2555.61	0.061-	0.267	0.019-	0.299	0.085	0.089-	0.024
2588.01	0.055-	0.282	0.015-	0.314	0.080	0.097-	0.022
2620.41	0.059-	0.287	0.020-	0.323	0.085	0.104-	0.034
2652.81	0.068-	0.304	0.019-	0.341	0.091	0.104-	0.030
2685.21	0.068-	0.308	0.026-	0.347	0.094	0.106-	0.029
2717.61	0.068-	0.317	0.026-	0.354	0.094	0.112-	0.029
2750.01	0.076-	0.317	0.026-	0.367	0.100	0.112-	0.030
2782.41	0.084-	0.315	0.030-	0.374	0.094	0.110-	0.034
2814.81	0.084-	0.319	0.032-	0.381	0.100	0.120-	0.036
2847.21	0.084-	0.319	0.034-	0.385	0.100	0.120-	0.034
2879.61	0.080-	0.325	0.041-	0.392	0.094	0.124-	0.034
2912.01	0.096-	0.329	0.039-	0.392	0.096	0.116-	0.030
2944.41	0.084-	0.325	0.028-	0.388	0.100	0.120-	0.036
2976.81	0.074-	0.300	0.030-	0.350	0.078	0.128-	0.039
3009.21	0.072-	0.257	0.034-	0.307	0.065	0.135-	0.046
3041.61	0.063-	0.238	0.036-	0.290	0.060	0.131-	0.044
3074.01	0.061-	0.233	0.034-	0.279	0.056	0.122-	0.043
3106.41	0.061-	0.223	0.024-	0.272	0.058	0.120-	0.041
3138.81	0.051-	0.223	0.028-	0.267	0.058	0.106-	0.041
3171.21	0.051-	0.229	0.026-	0.265	0.060	0.097-	0.034

CALC	06/25/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA
CHECK	EGBERT 6/29/62				5-652
APR	CRAM 7-6-62				
APR					
CONTRACT NO.					D2-80081 PAC FIG 276

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
3203.61	0.053-	0.227	0.020-	0.268	0.056	0.104-	0.037
3236.01	0.047-	0.227	0.022-	0.265	0.060	0.102-	0.027
3268.41	0.049-	0.227	0.024-	0.268	0.063	0.097-	0.027
3300.81	0.059-	0.242	0.020-	0.278	0.065	0.095-	0.027
3333.21	0.057-	0.238	0.019-	0.281	0.069	0.100-	0.027
3365.61	0.053-	0.259	0.022-	0.294	0.065	0.106-	0.024
3398.01	0.061-	0.263	0.022-	0.301	0.071	0.114-	0.025
3430.41	0.061-	0.274	0.026-	0.316	0.078	0.112-	0.024
3462.81	0.063-	0.280	0.030-	0.318	0.071	0.114-	0.029
3495.21	0.072-	0.280	0.022-	0.321	0.074	0.114-	0.025
3527.61	0.068-	0.295	0.026-	0.345	0.078	0.114-	0.030
3560.01	0.066-	0.304	0.030-	0.352	0.080	0.126-	0.029
3592.41	0.084-	0.312	0.026-	0.358	0.084	0.122-	0.034
3624.81	0.078-	0.327	0.034-	0.374	0.085	0.128-	0.029
3657.21	0.076-	0.334	0.034-	0.390	0.093	0.131-	0.029
3689.61	0.084-	0.344	0.030-	0.394	0.091	0.135-	0.036
3722.01	0.080-	0.347	0.039-	0.399	0.091	0.141-	0.036
3754.41	0.090-	0.347	0.045-	0.407	0.094	0.143-	0.034
3786.81	0.084-	0.347	0.041-	0.414	0.091	0.139-	0.032
3819.21	0.094-	0.344	0.043-	0.419	0.094	0.141-	0.034
3851.61	0.088-	0.351	0.047-	0.412	0.091	0.147-	0.030
3884.01	0.086-	0.347	0.047-	0.419	0.091	0.143-	0.029
3916.41	0.096-	0.351	0.049-	0.421	0.093	0.143-	0.041
3948.81	0.102-	0.347	0.049-	0.419	0.094	0.145-	0.036
3981.21	0.092-	0.355	0.047-	0.423	0.093	0.151-	0.034
4013.61	0.096-	0.355	0.051-	0.421	0.093	0.155-	0.034
4046.01	0.094-	0.351	0.053-	0.425	0.089	0.153-	0.036
4078.41	0.096-	0.355	0.051-	0.430	0.093	0.155-	0.037
4110.81	0.094-	0.359	0.055-	0.430	0.085	0.155-	0.034
4143.21	0.102-	0.353	0.053-	0.437	0.093	0.155-	0.039
4175.61	0.108-	0.353	0.051-	0.437	0.094	0.157-	0.037
4208.01	0.102-	0.361	0.058-	0.434	0.094	0.155-	0.036
4240.41	0.104-	0.357	0.057-	0.437	0.094	0.159-	0.034
4272.81	0.104-	0.361	0.057-	0.443	0.094	0.159-	0.036
4305.21	0.104-	0.361	0.055-	0.437	0.091	0.164-	0.034
4337.61	0.106-	0.366	0.058-	0.443	0.087	0.166-	0.030
4370.01	0.104-	0.357	0.060-	0.436	0.085	0.161-	0.034
4382.97	0.100-	0.364	0.057-	0.447	0.085	0.168-	0.030
4399.17	0.179-	0.359	0.127-	0.463	0.076	0.170-	0.017
4415.57	0.210-	0.349	0.165-	0.476	0.069	0.178-	0.012

CALC	06/25/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	ERBERT 6/29/62				
APR	CRAM 7-6-62				
APR					
CONTRACT NO.					F16 277

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2.5000

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
4431.57	0.255-	0.340	0.207-	0.470	0.065	0.178-	0.008
4447.77	0.269-	0.336	0.220-	0.467	0.062	0.182-	0.008
4463.97	0.281-	0.336	0.241-	0.468	0.054	0.182-	0.001
4480.17	0.305-	0.327	0.256-	0.465	0.054	0.174-	0.001-
4496.37	0.328-	0.317	0.279-	0.457	0.054	0.174-	0.000
4512.57	0.281-	0.347	0.243-	0.483	0.054	0.192-	0.008
4526.07	0.273-	0.342	0.228-	0.479	0.056	0.186-	0.006
4527.15	0.273-	0.346	0.231-	0.481	0.062	0.186-	0.000
4528.23	0.265-	0.344	0.233-	0.483	0.056	0.192-	0.010
4529.31	0.263-	0.347	0.228-	0.481	0.054	0.190-	0.006
4530.39	0.269-	0.347	0.224-	0.481	0.060	0.188-	0.006
4546.59	0.291-	0.327	0.247-	0.479	0.056	0.186-	0.001
4562.79	0.334-	0.319	0.281-	0.454	0.049	0.170-	0.005-
4578.99	0.338-	0.319	0.298-	0.457	0.042	0.176-	0.008-
4595.19	0.360-	0.312	0.304-	0.452	0.047	0.168-	0.007-
4611.39	0.309-	0.336	0.266-	0.476	0.052	0.195-	0.001-
4625.97	0.275-	0.351	0.233-	0.488	0.051	0.190-	0.005
4627.05	0.281-	0.351	0.235-	0.487	0.054	0.190-	0.003
4628.13	0.281-	0.344	0.235-	0.485	0.058	0.188-	0.012
4629.21	0.283-	0.344	0.235-	0.477	0.054	0.186-	0.008
4630.29	0.281-	0.346	0.239-	0.479	0.058	0.197-	0.008
4646.49	0.293-	0.336	0.254-	0.476	0.051	0.184-	0.003-
4662.69	0.318-	0.314	0.285-	0.465	0.043	0.184-	0.001-
4678.89	0.342-	0.321	0.305-	0.456	0.042	0.176-	0.007-
4695.09	0.358-	0.312	0.313-	0.454	0.040	0.174-	0.007-
4711.29	0.372-	0.308	0.332-	0.450	0.038	0.168-	0.014-
4727.49	0.385-	0.306	0.334-	0.447	0.036	0.168-	0.017-
4743.69	0.381-	0.312	0.330-	0.450	0.038	0.170-	0.012-
4759.89	0.342-	0.323	0.294-	0.470	0.045	0.182-	0.007-
4776.09	0.299-	0.342	0.254-	0.479	0.051	0.192-	0.001
4785.81	0.285-	0.344	0.252-	0.487	0.056	0.197-	0.006
4786.89	0.291-	0.355	0.252-	0.483	0.049	0.201-	0.003
4787.97	0.283-	0.353	0.247-	0.494	0.054	0.197-	0.003
4789.05	0.291-	0.355	0.248-	0.494	0.054	0.192-	0.001
4790.13	0.289-	0.344	0.248-	0.494	0.054	0.192-	0.001
4806.33	0.287-	0.351	0.258-	0.488	0.054	0.195-	0.006
4822.53	0.312-	0.344	0.269-	0.479	0.052	0.193-	0.003
4838.73	0.330-	0.329	0.288-	0.474	0.047	0.190-	0.003-
4854.93	0.344-	0.323	0.307-	0.468	0.036	0.180-	0.010-
4871.13	0.383-	0.302	0.330-	0.457	0.034	0.170-	0.014-
CALC	06/25/62		REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY		
CHECK	EGBERT 6/29/62						
APR	SRPM 7-6-62						
APR							
CONTRACT NO.					EWA 5-652 12-8-62 PAGE Fig 218		

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	INCHES						
1887.33	0.399-	0.299	0.349-	0.448	0.032	0.168-	0.015-
1903.53	0.407-	0.293	0.357-	0.439	0.034	0.170-	0.012-
1919.73	0.415-	0.289	0.381-	0.434	0.029	0.170-	0.014-
1935.93	0.415-	0.297	0.378-	0.432	0.032	0.170-	0.017-
1952.13	0.375-	0.325	0.328-	0.465	0.038	0.182-	0.008-
1968.33	0.338-	0.332	0.286-	0.481	0.036	0.190-	0.000-
1984.53	0.305-	0.340	0.267-	0.487	0.051	0.199-	0.003
1993.71	0.297-	0.355	0.258-	0.490	0.049	0.197-	0.000-
1994.79	0.301-	0.347	0.258-	0.494	0.049	0.197-	0.010
1995.87	0.301-	0.347	0.260-	0.490	0.052	0.192-	0.001
1996.95	0.301-	0.351	0.262-	0.488	0.049	0.195-	0.006
1998.03	0.291-	0.361	0.260-	0.497	0.045	0.197-	0.001
5014.23	0.297-	0.344	0.260-	0.487	0.045	0.205-	0.005
5030.43	0.312-	0.344	0.269-	0.481	0.043	0.197-	0.000-
5046.63	0.338-	0.334	0.298-	0.477	0.040	0.192-	0.007-
5062.83	0.366-	0.315	0.323-	0.465	0.038	0.188-	0.015-
5079.03	0.395-	0.300	0.347-	0.447	0.032	0.172-	0.014-
5095.23	0.423-	0.291	0.374-	0.427	0.032	0.172-	0.017-
5111.43	0.425-	0.291	0.385-	0.427	0.027	0.166-	0.015-
5127.63	0.433-	0.285	0.395-	0.421	0.025	0.166-	0.021-
5143.83	0.450-	0.282	0.397-	0.421	0.025	0.151-	0.024-
5160.03	0.458-	0.278	0.412-	0.414	0.023	0.161-	0.021-
5176.23	0.462-	0.280	0.414-	0.416	0.025	0.161-	0.015-
5192.43	0.466-	0.278	0.421-	0.410	0.021	0.161-	0.021-
5208.63	0.486-	0.276	0.425-	0.410	0.021	0.155-	0.026-
5224.83	0.494-	0.267	0.444-	0.405	0.020	0.155-	0.021-
5241.03	0.501-	0.265	0.446-	0.403	0.023	0.155-	0.026-
5257.23	0.505-	0.268	0.459-	0.398	0.018	0.157-	0.022-
5273.43	0.511-	0.272	0.463-	0.405	0.016	0.159-	0.028-
5289.63	0.527-	0.268	0.473-	0.405	0.021	0.153-	0.026-
5305.83	0.547-	0.265	0.492-	0.396	0.018	0.151-	0.026-
5322.03	0.549-	0.267	0.488-	0.401	0.018	0.151-	0.029-
5330.67	0.551-	0.267	0.488-	0.403	0.014	0.147-	0.026-
5363.07	0.514-	0.355	0.281-	0.492	0.047	0.199-	0.010
5395.47	0.507-	0.359	0.275-	0.496	0.049	0.209-	0.008
5427.87	0.305-	0.357	0.269-	0.496	0.049	0.205-	0.006
5460.27	0.305-	0.357	0.273-	0.494	0.047	0.203-	0.006
5492.67	0.293-	0.349	0.266-	0.476	0.032	0.209-	0.010
5525.07	0.301-	0.310	0.258-	0.441	0.027	0.201-	0.013
5557.47	0.291-	0.302	0.254-	0.434	0.027	0.193-	0.013

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 4/29/67				
APR	CRAM 7-6-67				
APR					
CONTRACT NO.					D2-80081 PA F16 279

TIME SEC.	1-2 D-01	5-2 D-02	6-2 D-03	1-3 D-04	2-3 D-05	5-3 D-06	6-3 D-07
	-----INCHES-----						
5589.87	0.275-	0.299	0.254-	0.421	0.029	0.193-	0.017
5622.27	0.277-	0.293	0.250-	0.410	0.032	0.188-	0.013
5654.67	0.271-	0.297	0.239-	0.399	0.027	0.190-	0.010
5687.07	0.259-	0.267	0.243-	0.370	0.021	0.205-	0.025
5719.47	0.253-	0.261	0.241-	0.363	0.025	0.192-	0.020
5751.87	0.255-	0.246	0.228-	0.354	0.025	0.186-	0.022
5784.27	0.238-	0.253	0.220-	0.347	0.025	0.182-	0.017
5816.67	0.198-	0.246	0.182-	0.310	0.032	0.153-	0.018
5849.07	0.181-	0.238	0.171-	0.303	0.023	0.157-	0.020
5881.47	0.188-	0.221	0.169-	0.278	0.020	0.161-	0.020
5913.87	0.183-	0.216	0.174-	0.272	0.014	0.155-	0.020
5946.27	0.181-	0.201	0.180-	0.265	0.014	0.155-	0.024
5978.67	0.181-	0.201	0.178-	0.263	0.016	0.151-	0.024
6011.07	0.177-	0.199	0.171-	0.256	0.014	0.147-	0.017
6043.47	0.181-	0.197	0.173-	0.252	0.018	0.143-	0.013
6075.87	0.143-	0.193	0.142-	0.234	0.018	0.126-	0.017
6108.27	0.143-	0.184	0.134-	0.229	0.011	0.133-	0.013
6140.67	0.139-	0.173	0.134-	0.210	0.003	0.133-	0.013
6173.07	0.143-	0.154	0.136-	0.189	0.003	0.128-	0.017
6205.47	0.137-	0.154	0.140-	0.189	0.000	0.126-	0.015
6237.87	0.141-	0.150	0.144-	0.178	0.003-	0.122-	0.006
6270.27	0.145-	0.142	0.148-	0.174	0.000	0.120-	0.008
6302.67	0.153-	0.137	0.148-	0.169	0.001-	0.112-	0.006
6335.07	0.141-	0.129	0.142-	0.165	0.009-	0.116-	0.008
6367.47	0.157-	0.124	0.153-	0.159	0.003-	0.102-	0.006
6431.01	0.149-	0.114	0.153-	0.149	0.007-	0.102-	0.003
6461.00	0.149-	0.099	0.152-	0.141	0.009-	0.100-	0.006
6491.21	0.141-	0.105	0.146-	0.136	0.011-	0.100-	0.003
6521.33	0.143-	0.101	0.153-	0.130	0.009-	0.089-	0.006
6551.15	0.151-	0.095	0.150-	0.123	0.013-	0.091-	0.003
6581.14	0.145-	0.088	0.150-	0.121	0.011-	0.087-	0.006
6610.87	0.143-	0.084	0.150-	0.116	0.011-	0.085-	0.003

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/72				
APR	CRAM 7-6-72				
APR					
CONTRACT NO.					FIG 280

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STANDARD BUSINESS FORMS

TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS
1586.31	0.020-	89.26	7.552
1618.71	0.018-	89.26	7.552
1651.11	0.018-	91.90	0.000
1683.51	0.016-	91.90	0.000
1715.91	0.020-	91.90	15.10
1748.31	0.023-	91.90	7.552
1780.71	0.020-	91.90	0.000
1813.11	0.023-	94.54	0.000
1845.51	0.020-	94.54	15.10-
1877.91	0.023-	94.54	0.000
1910.31	0.025-	97.18	0.000
2264.01	0.038-	110.4	0.000
2296.41	0.038-	110.4	22.66-
2328.81	0.041-	110.4	15.10-
2361.21	0.043-	110.4	0.000
2393.61	0.043-	113.0	15.10-
2426.01	0.043-	113.0	15.10-
2458.41	0.045-	113.0	15.10-
2490.81	0.047-	118.3	15.10-
2523.21	0.052-	121.0	15.10-
2555.61	0.054-	121.0	0.000
2588.01	0.056-	123.6	7.552-
2620.41	0.060-	123.6	45.31-
2652.81	0.060-	126.2	22.66-
2685.21	0.061-	126.2	15.10-
2717.61	0.061-	131.5	30.21-
2750.01	0.065-	131.5	45.31-
2782.41	0.070-	134.2	30.21-
2814.81	0.065-	134.2	30.21-
2847.21	0.072-	136.8	30.21-
2879.61	0.080-	139.4	15.10-
2912.01	0.078-	139.4	37.76-
2944.41	0.081-	139.4	30.21-
2976.81	0.080-	142.1	37.76-
3009.21	0.081-	144.7	30.21-
3041.61	0.087-	144.7	30.21-
3074.01	0.085-	147.4	22.66-
3106.41	0.083-	147.4	15.10-
3138.81	0.087-	147.4	22.66-
3171.21	0.087-	150.0	22.66-

CALC	06/25/72	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 COND. NO. 01 SPEC. 0302 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	Robert H. H. H.				
APP	CRAM				
APP					
CONTRACT NO.					D2-80081 PAGE F16 281

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TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS
.33	0.005-	75.90	15.10-
.87	0.003	75.90	7.552
33.27	0.000	75.90	7.552
65.67	0.007	75.90	22.66
98.07	0.001	75.90	7.552-
130.47	0.001-	75.90	7.552
162.87	0.001-	75.90	7.552
195.27	0.001	75.90	7.552
227.67	0.000	75.90	15.10
260.07	0.001	75.90	7.552
292.47	0.005	75.90	22.66
324.87	0.007	73.16	30.21
357.27	0.001	75.90	15.10
389.67	0.001-	75.90	7.552
422.07	0.003	75.90	15.10-
454.47	0.003	75.90	15.10
486.87	0.003-	75.90	7.552
519.27	0.001	75.90	15.10
537.63	0.001-	75.90	15.10
905.91	0.001-	78.65	15.10
938.31	0.005-	78.65	0.000
970.71	0.009-	78.65	7.552
1003.11	0.009-	78.65	0.000
1035.51	0.007-	78.65	15.10
1067.91	0.007-	81.34	7.552
1100.31	0.010-	81.34	7.552
1132.71	0.009-	78.65	0.000
1165.11	0.010-	81.34	7.552
1197.51	0.010-	81.34	7.552-
1229.91	0.009-	83.98	0.000
1262.31	0.010-	83.98	7.552
1294.71	0.010-	83.98	0.000
1327.11	0.007-	83.98	15.10-
1359.51	0.016-	83.98	0.000
1391.91	0.009-	83.98	0.000
1424.31	0.016-	86.62	0.000
1456.71	0.012-	83.98	15.10-
1489.11	0.018-	86.62	15.10-
1521.51	0.016-	86.62	15.10
1553.91	0.014-	86.62	7.552

CALC	06/25/2	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA
CHECK	EGBERT 6/29/2				5-652
APR	CRAM 7-62				02-80081
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2-5000

11109

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PIONEER BUSINESS FORMS

TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS
3203.61	0.081-	150.0	22.66-
3236.01	0.090-	150.0	30.21-
3268.41	0.081-	155.2	22.66-
3300.81	0.081-	152.6	30.21-
3333.21	0.083-	155.2	30.21-
3365.61	0.081-	157.9	30.21-
3398.01	0.090-	160.5	30.21-
3430.41	0.089-	155.2	37.76-
3462.81	0.087-	160.5	15.10-
3495.21	0.087-	160.5	45.31-
3527.61	0.089-	160.5	52.87-
3560.01	0.090-	163.1	45.31-
3592.41	0.092-	160.5	45.31-
3624.81	0.094-	163.1	45.31-
3657.21	0.099-	163.1	52.87-
3689.61	0.098-	165.7	45.31-
3722.01	0.101-	168.4	45.31-
3754.41	0.096-	168.4	45.31-
3786.81	0.096-	171.0	45.31-
3819.21	0.098-	171.0	52.87-
3851.61	0.099-	176.2	45.31-
3884.01	0.101-	176.2	60.42-
3916.41	0.099-	176.2	60.42-
3948.81	0.101-	176.2	45.31-
3981.21	0.109-	178.9	52.87-
4013.61	0.107-	176.2	52.87-
4046.01	0.107-	184.1	37.76-
4078.41	0.112-	184.1	60.42-
4110.81	0.110-	186.7	60.42-
4143.21	0.107-	184.1	60.42-
4175.61	0.114-	186.7	52.87-
4208.01	0.110-	189.4	60.42-
4240.41	0.114-	186.7	52.87-
4272.81	0.116-	189.4	67.97-
4305.21	0.114-	192.0	52.87-
4337.61	0.123-	192.0	45.31-
4370.01	0.118-	192.0	67.97-
4382.97	0.125-	197.2	67.97-
4399.17	0.123-	192.0	188.8
4415.37	0.112-	194.6	385.2
CALC	06/25/62	REVISED	DATE
CHECK	ECBERT 6/29/62		
APR	CRAM 7-6-62		
APR			
CORRUGATED SHEAR WEB PANEL			
EWA NO. 05652 SPEC. 0302			
COND. NO. 01 RUN 11			
THE BOEING COMPANY			
CONTRACT NO.			

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2.5000

TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS	
4431.57	0.098-	194.6	626.9	
4447.77	0.094-	197.2	687.3	
4463.97	0.099-	199.9	853.4	
4480.17	0.085-	197.2	1072.	
4496.37	0.083-	197.2	1344.	
4512.57	0.101-	202.5	377.6	
4526.07	0.107-	202.5	181.3	
4527.15	0.107-	199.9	166.2	
4528.23	0.109-	202.5	181.3	
4529.31	0.109-	202.5	166.2	
4530.39	0.110-	202.5	173.7	
4546.59	0.098-	199.9	581.5	
4562.79	0.083-	202.5	1352.	
4578.99	0.085-	202.5	1586.	
4595.19	0.070-	202.5	1782.	
4611.39	0.096-	202.5	649.5	
4625.97	0.110-	205.1	151.0	
4627.05	0.109-	202.5	151.0	
4628.13	0.107-	202.5	166.2	
4629.21	0.109-	202.5	166.2	
4630.29	0.107-	202.5	173.7	
4646.49	0.099-	199.9	566.4	
4662.69	0.098-	205.1	1125.	
4678.89	0.087-	205.1	1571.	
4695.09	0.081-	205.1	1828.	
4711.29	0.076-	207.7	2062.	
4727.49	0.070-	207.7	2273.	X
4743.69	0.076-	207.7	1949.	
4759.89	0.092-	207.7	1057.	
4776.09	0.107-	207.7	241.7	
4785.81	0.118-	207.7	166.2	
4786.89	0.119-	210.4	166.2	
4787.97	0.112-	210.4	151.0	
4789.05	0.109-	207.7	158.6	
4790.13	0.110-	205.1	166.2	
4806.33	0.114-	210.4	271.9	
4822.53	0.103-	210.4	649.5	
4838.73	0.105-	207.7	1042.	
4854.93	0.092-	213.0	1480.	
4871.13	0.078-	210.4	2054.	X
CALC	06/25/62	REVISED	DATE	
CHECK	EGBERT 6/29/62			
APR	CRAM 7-6-62			
APR				
CORRUGATED SHEAR WEB PANEL				EWA
EWA NO. 05652				5-652
COND. NO. 01				
SPEC. 0302				
RUN 11				
THE BOEING COMPANY				D2-8003
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TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG F	2-4 L-01 POUNDS
4887.33	0.067-	210.4	2334.
4903.53	0.067-	213.0	2515.
4919.73	0.070-	213.0	2779.
4935.93	0.067-	215.6	2719.
4952.13	0.085-	213.0	1548.
4968.33	0.098-	213.0	709.9
4984.53	0.114-	215.6	211.5
4993.71	0.116-	213.0	166.2
4994.79	0.112-	213.0	166.2
4995.87	0.114-	213.0	181.3
4996.95	0.112-	215.6	166.2
4998.03	0.114-	215.6	173.7
5014.23	0.118-	215.6	271.9
5030.43	0.110-	215.6	687.3
5046.63	0.105-	215.6	1148.
5062.83	0.090-	215.6	1609.
5079.03	0.076-	215.6	2183.
5095.23	0.063-	218.2	2764.
5111.43	0.065-	218.2	2968.
5127.63	0.063-	218.2	3149.
5143.83	0.056-	218.2	3285.
5160.03	0.054-	218.2	3451.
5176.23	0.056-	220.9	3421.
5192.43	0.060-	218.2	3603.
5208.63	0.052-	218.2	3655.
5224.83	0.045-	218.2	3905.
5241.03	0.043-	220.9	3980.
5257.23	0.047-	223.5	4109.
5273.43	0.050-	223.5	4033.
5289.63	0.041-	223.5	4222.
5305.83	0.041-	220.9	4320. uel
5322.03	0.041-	220.9	4244.
5330.67	0.041-	223.5	4214.
5363.07	0.125-	223.5	75.52-
5395.47	0.125-	223.5	83.08-
5427.87	0.132-	226.1	105.7-
5460.27	0.125-	226.1	90.63-
5492.67	0.134-	228.7	98.18-
5525.07	0.125-	228.7	90.63-
5557.47	0.125-	228.7	105.7-

CALC	06/25/62	REVISED	DATE	CORRUGATED SHEAR WEB PANEL EWA NO. 05652 SPEC. 0302 COND. NO. 01 RUN 11 THE BOEING COMPANY	EWA 5-652
CHECK	EGBERT 6/29/62				
APR	CRAM 7-6-62				
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TIME SEC.	1-4 D-08 INCHES	3-4 T-46 DEG. F	2-4 L-01 POUNDS
5589.87	0.127-	228.7	90.63-
5622.27	0.121-	228.7	98.18-
5654.67	0.118-	228.7	105.7-
5687.07	0.129-	228.7	98.18-
5719.47	0.125-	228.7	120.8-
5751.87	0.119-	228.7	113.3-
5784.27	0.116-	228.7	105.7-
5816.67	0.109-	226.1	90.63-
5849.07	0.110-	226.1	90.63-
5881.47	0.105-	223.5	120.8-
5913.87	0.107-	223.5	113.3-
5946.27	0.109-	223.5	105.7-
5978.67	0.107-	223.5	105.7-
6011.07	0.109-	223.5	98.18-
6043.47	0.098-	223.5	105.7
6075.87	0.096-	220.9	105.7-
6108.27	0.094-	220.9	105.7-
6140.67	0.092-	218.2	113.3-
6173.07	0.090-	218.2	113.3-
6205.47	0.087-	215.6	105.7-
6237.87	0.089-	218.2	90.63-
6270.27	0.085-	215.6	98.18-
6302.67	0.080-	213.0	120.8-
6335.07	0.076-	213.0	98.18-
6367.47	0.078-	213.0	113.3-
6431.01	0.074-	207.7	105.7-
6461.00	0.069-	207.7	113.3-
6491.21	0.069-	207.7	113.3-
6521.33	0.072-	205.1	98.18-
6551.15	0.065-	205.1	113.3-
6581.14	0.060-	202.5	105.7-
6610.87	0.060-	202.5	98.18-

CALC	06/25/2		REVISED	DATE	CORRUGATED SHEAR WEB PANEL	EWA 5652
CHECK	EGBERT	6-29-2			EWA NO. 05652 SPEC. 0302	
APPD	CRAM	7-6-2			COND. NO. 01 RUN 11	D2-80081
APPD					THE BOEING COMPANY	PAGE FIG. 286

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